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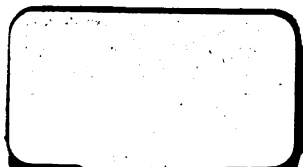
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CREATION
IN PLAN AND IN PROGRESS:

BEING AN

ESSAY ON THE FIRST CHAPTER OF GENESIS.

BY THE REV.

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Πίστει νοοῦμεν κατηρτίσθαι τοὺς αἰῶνας ῥήματι Θεοῦ. Heb. xi. 3.

MACMILLAN AND CO.

Cambridge:

AND 23, HENRIETTA STREET, COVENT GARDEN,

London.

1861.

Cambridge:

**PRINTED BY C. J. CLAY, M. A.
AT THE UNIVERSITY PRESS.**



P R E F A C E.

THIS work was begun with the intention of answering the Essay entitled "Mosaic Cosmogony" in the volume of "Essays and Reviews," it being thought that after that volume had received so much attention and currency, it was the time for some one to speak on the scientific bearing of the questions discussed, who had gone into the depths of modern physical science, and at the same time did not share in the mistrust of the Scriptures which is so prominent a feature of those Essays. The course of the reasoning which I followed with this view, involved a leading idea, which is intended to be conveyed by the Title, *Creation in Plan and in Progress*; namely, that the creation, being a *work*, must have been, like every other work, *designed* as well as *executed*, and that this two-fold view of it is *in the Scriptures*. It was, however, found that the elucidation of this idea and carrying it out to its

consequences, so much outweighed in importance any other purpose which the book might answer; that it could no longer be regarded as merely a reply to the "Mosaic Cosmogony." For this reason all direct reference to that Essay is made in the notes, in order to keep the general argument free from adventitious matter.

Mr Goodwin's Essay has certainly the merit of bringing distinctly forward the questions and difficulties which it is reasonable to ask for explanations of from those who maintain the Divine Authority of the first Chapter of Genesis, although he has contributed nothing towards any answer to these questions.

In the course of this Essay I have adduced answers and explanations drawn from principles which are appropriate to the science of Scripture, and distinct from the principles of Natural science. I would particularly call the attention of the reader to the discussion in the Introduction (pp. 6—10) respecting the distinction between the view of nature as presented to sense, and as presented by the light of science.

In writing this Work I have experienced much difficulty from the consciousness that the very elements of what I have ventured to call *Scriptural science* are at this time but little known, and that many would not even allow that there is such a science. It is reasonable to request that this should be taken into account if any of the arguments should appear novel and strange; and, since the book is a little one, I may be permitted to ask those who read it once, to read it again before they discard it. Unless this be done, the reasons for *Italicising* certain of the words, which, as the subject is difficult to follow, it was thought would contribute to clearness, will scarcely be understood.

For the sake of the generality of readers, technical terms have been as much as possible avoided in the text and thrown into notes, and all the Greek and the criticisms are confined to the notes.

J. C.

CAMBRIDGE, *June 25, 1861.*

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AN ESSAY
ON THE
FIRST CHAPTER OF GENESIS.

INTRODUCTION.

THE following Essay on the account of the Creation given in the first Chapter of the Book of Genesis, is the result of very long consideration of the subject, in the course of which I have endeavoured from time to time to regard the various statements contained in that account both from a scientific point of view and from that which is demanded by the character of the Divine Record; and having by slow degrees arrived at definite ideas respecting the relation of physical science to this portion of the Scriptures, I am induced to publish them at this time in consequence of the recent appearance of writings on this subject, which call in question the

truth of the Scripture Cosmogony on scientific grounds¹. Reasons will be adduced in this Essay for concluding that the account given of the Creation in the Book of Genesis, interpreted *philosophically*, is in accordance with modern science.

The first chapter of Genesis professes to be a record of events which took place *anterior to human experience*. It forms the exordium of a volume, which, although consisting of various parts, written by different authors at different times, lays claim to be regarded as a whole, and as distinct from all other compositions, inasmuch as some portions, intimately connected and interwoven with the rest, claim to be communications from God Himself, and to express His very words. Certain of these communications profess to give an account of events *before they have become matters of human experience*. Now as it will not be contended that any man has of himself the power (excepting in certain cases by scientific aids which here are out of the question) of knowing what will happen subsequently to human experience, it is at least in accordance with that profession, that one of the authors asserts, that

¹ I allude especially to one of the lately published "Essays and Reviews," entitled "Mosaic Cosmogony." In the remarks I may hereafter have occasion to make on this production, I shall refer to it as the "Essay," and to the author of it as the "Essayist."

“prophecy came not in old time by the will of man, but holy men of God spake as they were moved by the Holy Spirit.” But the account in the first chapter of Genesis, having reference to facts out of the pale of human experience, clearly comes under the same category as prophecy. It equally claims to be Divine Revelation,—to be a communication from the Spirit of the Creator Himself. If it be less than this,—if any human element enters into its composition,—it is worthy of no consideration whatever, because at the time it was written, and for ages after, there existed no human knowledge on which a trustworthy cosmogony could be based¹.

It is clear, then, that what we have to examine into is, whether the pretension which this account of the Creation bears on the face of it of being a divine revelation, be well founded or not. And in conducting this examination we may begin with assuming that it

¹ For this reason I object *in limine* to the title “*Mosaic Cosmogony*,” if it be thereby implied that the circumstances of the supposed writer, and his connection with “the Hebrew race,” are of any moment. The introduction of these considerations in the “*Essay*,” in which the question as to whether the Scriptural account of the Cosmogony is human or divine is evidently raised, is simply a begging of the point at issue, and appears to be indicative of a prejudgment on the part of the author unbecoming a philosophic enquirer. Also I do not understand what is meant by “the Mosaic writer.”

is what it professes to be, and then proceed to test the truth of this hypothesis by the consequences to which it leads.

In the first place, we assume on this hypothesis that the record was made by One who was perfectly cognisant of the things recorded, and completely understood their relation to the subsequent destinies of the earth and its inhabitants. Again, the statements of such a record, provided we fully comprehend what is stated, may be brought into comparison with human experience and matters of common observation. On this ground I fully admit that the deductions from geological discovery, and from astronomical science, may be legitimately compared with the statements contained in the Scripture cosmogony, and should be in harmony with them if the comparison be made on principles that are consonant with the character of the record.

Before instituting such a comparison, we must endeavour to ascertain on what principles the statements are made, and with what intent. The preliminary consideration of these questions will serve to prepare the way for making the comparison in an appropriate manner.

We may begin with remarking that this portion of Scripture is often referred to in other parts of the Bible, and in such a way as to shew that the in-

struction it gives is an essential component of the general system of Scriptural doctrine. It is appealed to in one of the ten commandments as containing the reason for a positive institution, the observance of which has continued to the present day. We meet with references to it in the Psalms and the Prophets, and in two places it is commented upon in the Epistle to the Hebrews. In short, it cannot be dissociated from the rest of the Scriptures, which without it would be incomplete. This relation of the first chapter of Genesis to the Scriptures regarded as a whole, must be taken into account in considering both the principle and the purpose of its statements.

First, it may be thence inferred that the mode of speaking of natural phenomena which occurs in the Bible generally, is also employed here. It would be wholly unreasonable to expect that terms and statements relating to natural subjects would accord in one chapter of the Bible with the language of modern science, while in all other parts such subjects are spoken of in language which some would now call *unscientific*. For instance, the Earth is regarded as absolutely fixed, and the Sun is said to move in diurnal and annual courses; whereas Astronomy teaches that the Sun is fixed, and that the Earth rotates daily about an axis, and performs a course yearly about the Sun. The Bible

speaks of what is *apparent*¹ to the senses; science discloses what is not apparent, and only to be known by *inference*. We must, accordingly, suppose that in the description of the cosmogony, such things only are stated as would have been apparent to a supposed spectator situated at the time on the Earth's surface. Here, however, an important distinction is to be made, which will demand careful consideration.

Care must be taken to distinguish between *physical operations* and their *sensational consequences*; that is, not to confound two classes of facts, which, though related and co-ordinate, are in kind wholly distinct. What I mean will perhaps be understood by a familiar instance. By experiment and mathematics it has been ascertained that *sound* is produced by *vibrations* of the air, that *loudness* depends on the *extent* of the vibrations, that the *pitch* of a musical note depends on the *number* of vibrations in a given time, and that the *harmony* of two musical notes depends on the *ratio* of the number of the vibrations corresponding to one, to

¹ I here use the word in the sense of *manifest*, i. e. palpable to the senses, and therefore *real*. The "Essayist" (p. 236) regards what is apparent as opposite to what is real, in a sense nearly akin to *deceptive*. This use of the word, as applied to natural objects, is probably not so old as the discovery of the earth's motion. In the Authorised Version of Numb. xii. 8 we have, "With him will I speak mouth to mouth, even apparently, and not in dark speeches."

the number of the vibrations in the same time corresponding to the other. These results having been ascertained by modern science, we may arrange on one side, *sound, loudness, pitch, harmony*, and on the other, *vibrations, extent of vibrations, number of vibrations, ratio of numbers of vibrations*. So with regard to light, on the hypothesis that its phenomena are referable to the vibrations of a medium analogous to air, but more elastic and more widely extended, we have on one side what all the world calls *light, degree of brightness, and colour*, and on the other, *vibrations, extent of vibrations, and number of vibrations* in a given time. Now one of these sets of names expresses *facts* (things made, or caused to be), just as much as the other, but the classes of facts are essentially different. One kind may be properly called *personal sensations*, being proper to each individual, while the other is a class of facts external to the individual, which have neither been known long nor known to many, their existence having been ascertained for the most part by modern scientific research. The department of science in which such enquiries are made being called *Dynamics*, the facts elicited may be called *physical operations*. And, considering that the relation between the two classes is such that an antecedent fact in one has its analogue and consequent in the other, we may call the latter class *sensational con-*

sequences of physical operations. But because the operations and the consequences are utterly diverse in kind, there is no human knowledge nor means of research by which it could be anticipated that *such* consequences would follow from *such* operations. The relation being one of *mere antecedence and consequence*, and not a relation between cause and effect such as we have the means of understanding, what else can we say of it than that it exists by the *immediate* volition of the Author of our being? That it is so is wonderful, —is a *miracle*¹.

Similar considerations apply to the apparent fact of the fixity of the Earth, that is, to the fact that to sense the Earth is motionless. The mathematician who has enquired into the motions of the bodies of the solar system, knows that so long as he takes account of all the forces, he may calculate all the motions relatively to the position of one of the bodies which he assumes to be fixed. But long before this mathematical abs-

¹ This distinction between sensations and external physical operations is like that between *mind* and *body*, and I am not sure that the one is not closely allied to the other. For experience shews that where the external and bodily conditions appear to be the same, there is not in different persons the same perception of melody and harmony, nor the same power of distinguishing colours, owing probably to differences between mind and mind, such as on other grounds are known to exist.

traction was thought of, the experience of each individual taught him that he does not by his *senses* perceive his own motion, but only *the change of relative direction of another body*. And though these sensational facts are analogous to the mathematician's fixed point and relative motion, they are not explained by the latter, just because we cannot argue from relations of space to sensations. The non-perception by the senses of *personal* motion, which may be regarded as a primary law of our psychical constitution directly imposed by the Creator, gives rise to the sense of fixity of position, as soon as a change of the relative direction of an external body is recognised. Hence the apparent immotion¹ of the Earth is a general sensational fact, out of the category of, and therefore not opposed to, any facts respecting its motion deduced from the reasonings of physical science.

The above distinction between *facts of interior sense* and *external physical operations* being admitted, it may next be asserted that the former are both *apparent* and *real*, and the latter *real* but *not apparent*. Now it is

¹ This word is wanted to express what is not expressed by *immobility* or *fixity*. In the above reasoning, "fixity" is used in the sense of being stationary, and not in that of incapability of being moved. Also the perception of motion derived from personal exertion in making progress, or from the feeling of shocks from obstacles, is clearly excluded from the argument.

important to remark that the Scriptures throughout only take account of what is real as being cognisable by the senses, and are altogether silent as to unfelt movements, and the *modus operandi* of invisible physical forces. There can be no question as to which of the two classes of facts subserves most, or most directly, to the purposes of life, whether natural or spiritual. The earth had been inhabited by man nearly six thousand years before the arcana of the universe began to be revealed by exact science. It is clear, therefore, since it must be admitted that during that long interval there were many who learnt the will of God and through faith obeyed it, that to accomplish this the end of their life on earth, a knowledge of physical laws was not necessary. On the other hand, the objects of the natural world, *as seen and heard and felt*, are *necessary* antecedents to all spiritual knowledge, and *necessary* means of all moral discipline. The character of the Sacred Writings, which from beginning to end convey instruction by means of objective types and symbols, and the common experience of life, sufficiently attest this. But it has seemed good to the Wisdom of God to adapt the external world to these ends without any written communication of the means by which the objects of sense have received the appropriate qualities, or of the operations by which the qualities are maintained.

The data of spiritual science are given in the Scriptures; the data of natural science are only to be found in nature.

It may, however, be urged that modern science has revealed laws and operations, which not only owe their existence to the will of the Creator of all things, but have also become *known* by means of powers and faculties which He has bestowed upon us; and that consequently such knowledge is entitled to be considered as divine revelation, and may be placed in regard to its purposes and effects alongside of the revelations contained in the Scriptures. This cannot be denied. At the same time it is true that, as this kind of knowledge has received extraordinary developement within a comparatively small portion of the world's history, it is not the knowledge which is generally necessary for the education and instruction of the spirit of man for its future existence, and if it is destined to answer, or has in any degree answered, such a purpose, this must be attributable to circumstances peculiar to the times in which that developement has taken place. Further consideration of this point will be more appropriate at the conclusion of the Essay, where I propose to return to it. For the present so much as this may be admitted, that since objective facts, as recognised by the senses, are related in a constant manner to physical operations, so that the latter stand, as it

were, behind the former, we may legitimately apply our knowledge of physical laws, and the results of scientific research, in testing or explaining statements relative to natural phenomena, such as those that are given in the Scriptural account of the Creation.

The foregoing considerations may suffice to shew why the first chapter of Genesis, although, according to the hypothesis on which we are all along arguing, it is a communication from the Designer and Artificer of the Universe, contains no direct revelation of mediate causes or operations. Its purpose is distinct from this. It asserts that heaven and earth, and all the things therein are the *work* of God alone, and that creation had a beginning, and has an accomplishment. It mentions the *names* and *uses* of the principal created objects, indicates an *order* or *progression* in the creation, and especially speaks of the provision made for the sustenance in life of animals and of man. Finally, the dominion over the whole creation is given to man; by which it is to be understood that the creation subserves not alone to his present life, but also to a spiritual and immortal life. This inference is justified, as will be argued in the course of the Essay, by the relation of the contents of this chapter to the rest of God's Word, and by the terms in which the subjection of the whole creation to man is spoken of in other

passages. As the final purpose of the creation must determine the character of its parts, that purpose will be kept in mind in the explanations about to be given of the successive creations on the six days.

One other matter regarding the principles to be applied in the interpretation of the Scripture cosmogony, requires to be noticed here. In Gen. ii. 4, 5, there is a remarkable statement to the effect that "God made every plant of the field before it was in the earth, and every herb of the field before it grew," and that this was done on the day of the generation of heaven and earth, as recorded in the previous "book." Much will be said on this passage hereafter. At present I will only remark that it scarcely seems to admit of being taken in any other sense than as affirming that the foregoing account was a description of the *plan*, or antecedent *scheme*, of the creation, and not an historical account of creative *acts*. The description is, however, given in a narrative form; but since it is hardly conceivable that the plan of such a work could be described without reference to points of time, this circumstance does not prove that the account is historic. This being the case, I have thought that the best course would be to compare, in the first instance, the Scripture cosmogony with deductions from modern science on the supposition that it is given as a *history*, and then, if

contradictions should be met with, to consider whether they admit of being explained by making the supposition which the passage just quoted appears to demand, viz. that the antecedent plan of the Cosmogony, not the actual unfolding of it by process of time, is given in the first chapter of Genesis.

The questions that will have to be considered naturally divide themselves into two kinds. One kind has reference to the precise meaning of the Scriptural statements, which in writing of so ancient a date it is not always easy to determine. As a general rule the most obvious and literal meaning has been preferred. The other kind relates to the *modus operandi* of the physical agencies implied in the facts stated, and to deductions from geological research, and necessarily involves scientific considerations, with the introduction of some technical terms. Also it may be here stated that the text I have adopted is that of the Septuagint¹, chiefly because it appears to be sanctioned by quotations in the New Testament. The *ipsissima verba* of this text is of some importance. The original of each passage, as it is discussed, is on this account placed at the bottom of the page, accompanied by any critical remarks that may seem to be required.

¹ The edition edited by Field (Oxon. 1859) has been for the most part followed.

THE SCRIPTURE COSMOGONY CONSIDERED
WITH REFERENCE TO MODERN
PHYSICAL SCIENCE.

“In the beginning God created the heaven and the earth¹.” Gen. i. 1.

This initial sentence states comprehensively the subject of the succeeding account. “The heaven and the earth” may be taken as expressing inclusively all created objects. Since the plan and order of the whole creation must have co-existed in the Divine Mind with the commencement of the work (that is, with the beginning of succession in time), all things were in this sense created “in the beginning.” The Scriptures give no reasons for concluding that any created objects had existence before that creation of which the successive steps are described in the first chapter of Genesis.

“Now the earth was invisible and unfurnished².”
v. 2.

¹ Ἐν ἀρχῇ ἐποίησεν ὁ Θεὸς τὸν οὐρανὸν καὶ τὴν γῆν. The expressions ἀπ’ ἀρχῆς and ἀπὸ καταβολῆς κόσμου are used in Scripture as equivalent.

² Ἡ δὲ γῆ ἦν ἀόρατος καὶ ἀκατασκεύαστος. The particle δὲ is used

Antecedent to any creative operation, the earth which we now behold was not an objective reality, and the furniture that now adorns it and makes it useful, was non-existent. In the above assertion there is a negation of the existence of every thing of which the senses are cognisant. This may be inferred from a passage in the Epistle to the Hebrews (xi. 3), which affirms that "things seen were not made of things that do appear," and which may be considered to be an authoritative interpretation of this passage in Genesis.

"And darkness was upon the abyss¹." v. 2.

This clause is not to be taken in immediate connexion with the preceding one, because it contains the assertion of a *positive* existence. Darkness, it is true, is absence of light, but "the abyss" in its usual acceptance is depth without perceptible limit, and therefore implies the existence of *space*. From the previous negation of the existence of every thing the senses take cognisance of, it may be inferred that space itself was created. That this is the doctrine of Scripture

at the beginning of a narrative. In Rom. i. 20, *ἀόρατα* signifies things that are unseen because they are incapable of being seen.

¹ Καὶ σκότος ἐν ὕδατι τῆς ἀβύσσου. The preposition *ἐν ὕδατι* indicates an upper boundary of the abyss, as the same word in the next sentence indicates that there was an upper boundary of the water.

may be proved from Rom. viii. 39, where the Apostle has written, "neither height, nor depth, *nor any other creation*¹." The existence of space is indicated by the word "abyss" before any mention is made of specific forms of matter, because, in fact, space is independent of matter, but matter, since it has dimensions, is not independent of space, and can only exist in space.

"And a breath [or wind] of God was borne upon the water²." v. 2.

Here mention is first made of material substances. It may be argued, as before, from Gen. i. 2, interpreted by Heb. xi. 3, that matter was created. The *dimensions* of space, height, length, breadth, coexist only with *forms* of matter. The terms employed in the above sentence indicate that there was an *upper* boundary of the water. Hence it may be concluded that the abyss, having depth, and, as is implied by darkness being *upon* it, an upper boundary was specifically an abyss of water. It is to be noticed that water only is mentioned here, not land and water, and consequently no visible object indicated that the depth

¹ Οὐτε ὕψωμα, οὐτε βάθος, οὐτε τις κτίσις ἑτέρα.

² Καὶ πνεῦμα Θεοῦ ἐπεφέρετο ἐπάνω τοῦ ὕδατος. It is to be observed that the article is not prefixed to πνεῦμα.

was limited. Thus it seems that the material world, as it would have presented itself to human observation, was originally an expanse of water. This was its condition anterior to the creation of light.

The terms in which "breath" or "wind" is said to have been borne upon the face of the water, are the very same that are applied to the ark borne upon the waters of the deluge¹. They convey the idea of a *surface* or *boundary*, separating space occupied by water from space occupied by another material substance, contiguous to the water and at the same time distinct from it. The description, consequently, applies to a substance corresponding in position to that of the atmosphere now existing. It is named, in accordance with a general rule in Scripture, from a circumstance by which we are at all times sensible of its presence, viz. its being moved by our *breathing* it. In Gen. viii. 1, we are told that God brought "a wind" upon the earth and assuaged the waters of the deluge. The invisible agent which God employed on that occasion, might in another place be called a wind, or breath, of God. Unless the air be signified in Gen. i. 2, it is nowhere mentioned in the first chapter of Genesis. We should expect that so important an element would have a place in this account of the Creation, not alone

¹ Καὶ ἐνεπέφερο ἡ κυβωρὸς ἐνδὼ τοῦ ὕδατος. Gen. vii. 18.

because it is essential to life, but because being invisible, yet perceived by its effects, it is the external symbol of the Holy Spirit, and generally of what is *spiritual*.

“And God said, Let there be Light, and there was Light¹.” v. 3.

Light, as it is perceived by human sense, then for the first time came into existence, darkness having reigned before. “God commanded the light to shine out of darkness” are the words of St Paul (2 Cor. iv. 6), referring apparently to this passage. No mention is made of any operative means by which the light was first generated, and afterwards maintained. To speak of such means would have been contrary, as argued in the Introduction, to the principle that runs through the whole of the Scriptures, and especially this Chapter. One inference, however, of a physical character may be drawn from the Scripture account of the creation of light. Since the luminaries of heaven are said to have been created on the fourth day to shine on the earth, it may be concluded that when existence was given to light on the first day the earth became *self-luminous*.

¹ Καὶ εἶπεν ὁ Θεὸς· Γενηθήτω φῶς· καὶ ἐγένετο φῶς.

It has not been scientifically ascertained what are the exact conditions of self-luminousness of large masses. We know that chemical combination of different elements is one means of producing light. The effect in that case is probably due to the rapid movements of the combining elements through an ætherial medium, supposed to be the vehicle of light and heat, and to the agitation of the medium caused by such movements. Light results from vibrations of the æther, as sound from vibrations of the air. But various means of agitating the æther by the intervention of the motions of the constituent particles of bodies are practically possible. For instance, a bar of iron struck repeatedly with violence may be made to emit light, most probably because the strokes set its particles in motion, and these in turn cause vibrations of the æther. There are no scientific grounds for concluding that the primæval state of the earth above described, namely, an atmosphere resting on water, did not admit of the generation and emission of light. To this question I shall have to recur in treating of the work of the second day. At present I will only remark that as light and heat generally accompany each other, it may be assumed that contemporaneously with the first generation of light, there was a great developement of heat, and that by the agency of this heat a large quantity of the water was

converted into vapour, which, being sustained mechanically in the atmosphere, was superincumbent upon the surface of the water that remained fluid. This inference will hereafter assist us in comprehending the statement of what was done on the *second* day.

“And God saw the light, that it was good: and God separated between the light and the darkness¹.”

v. 4.

Here is the commencement of a *law of opposites*, which reigns throughout the universe. Light is opposed to darkness, and good to evil. The newly created light is pronounced to be “good;” and the same affirmation is subsequently made respecting the effect of every successive creative act². All is good, as proceeding from a wise and beneficent Creator, and accomplishing His purposes.

As light succeeded darkness, the separation between them has respect to *time*. It may be conceived to have taken effect also *in space*; for while light might pervade the atmosphere and the mass of vapour which has been supposed to rest on the water, the water itself,

¹ Καὶ εἶδεν ὁ Θεὸς τὸ φῶς, ὅτι καλόν· καὶ διεχώρισεν ὁ Θεὸς ἀναμέσον τοῦ φωτὸς καὶ ἀναμέσον τοῦ σκότους.

² The Greek word is constantly καλόν, in which the quality of beauty in appearance or form seems to be included.

being of great depth, would be comparatively in darkness.

“And God called the light Day, and the darkness He called Night¹.” v. 5.

Antecedent to the creation of external and sensible objects, *names* are non-existent. God Himself calls the light Day and the darkness Night, to shew that He purposed from the beginning that His creation should give origin to names of constant signification and permanent use. The name “day,” having received a definite signification by being applied to an objective reality, is used in the next sentence to carry on the narrative.

“And evening was, and morning was, one day².”
v. 5.

It was just before said that God “called the *light* day.” But here “day” is clearly a measure of *time*. How has it passed into this signification? This question appears to admit of the following answer. Neither continuous light nor continuous darkness can have any relation to measures of time; but the lapse of time

¹ Καὶ ἐκάλεσεν ὁ Θεὸς τὸ φῶς ἡμέραν, καὶ τὸ σκότος ἐκάλεσε νύκτα.

² Καὶ ἐγένετο ἑσπέρα, καὶ ἐγένετο πρωΐ, ἡμέρα μία.

may be indicated, and duration measured, by *alternations* of light and darkness. To constitute what is commonly understood to be a day, there must be a beginning of darkness and a beginning of light,—evening and morning. Hence the statements “evening was” and “morning was” are put in apposition with “one day.” The whole period is called by the name originally appropriated to light, because of the superiority, for the purposes of human life, of day-time to night-time.

It would be inconsistent with what is stated subsequently, to assume that this first day was of twenty-four hours’ duration and was limited by a revolution of the Sun, the existence of the Sun as a luminary not being recognised till the *fourth* day. It would also be doing violence to the principle (maintained strictly to the end of verse 10) of using terms only in significations which they have received from antecedent facts. The occurrence of “heaven and earth” in verse 1, and of “earth” in verse 2, are no exceptions to this rule, because in those instances the terms are used in introductory and general assertions made previous to the mention of any specific act of creation. According to this principle the evening and the morning of the first day were not marked by the setting and rising of the Sun, but by other facts which might be properly

described as the commencement of darkness at a certain epoch, and the commencement of light at a subsequent epoch. Now the previous part of the account supplies the natural marks of these epochs. Darkness commenced when the abyss of waters came into existence, that is, as soon as an object existed which was not *visible*. The other epoch was marked by the shining at God's command of light out of darkness. It is evident that on this account "evening" is put before "morning¹." At the completion of the first day there must have been some natural operation to limit the duration of the period of light. What that might be will have to be considered in treating of the second day.

"And God said, Let there be a firmament in the midst of the water, and let it separate water from water: and it was so²." v. 6.

I have adopted the word 'firmament' in this translation, because it is now generally used to signify the

¹ It is probable that the custom of the Hebrews to reckon the beginning of the day from evening had its origin in this portion of their Scriptures.

² Καὶ εἶπεν ὁ Θεὸς· Γενήθητι στερέωμα ἐν μέσῳ τοῦ ὕδατος, καὶ ἔστω διαχωρίζων ἀναμέσον ὕδατος καὶ ὕδατος· καὶ ἐγένετο οὕτως. In the English Version the clause, "and it was so," does not occur at the end of v. 6, after the command, but at the end of v. 7, after the act, where it appears to be inappropriate.

upper regions of space, apart from the idea of firmness or solidity. That this is the sense in which it must be taken in this passage may be gathered from the context, and from the use of it in subsequent parts of the Chapter, as I shall have occasion to argue hereafter. The corresponding Greek word properly signifies firmness or solidity in the abstract, without reference to a particular solid body; and, still more abstractedly, its root¹ was used to designate a form of space filled by a solid. We might, therefore, legitimately substitute 'expanse' for 'firmament' in the above passage, and this rendering would be justified by the general use in the Scriptures of concrete terms in abstract senses.

The first day exhibited space limited by a single surface, namely the surface of the water. For neither the upper boundary of the atmosphere, nor that of a mass of vapour superincumbent on the water, would be recognised by a spectator at the earth's surface. On the second day a separation is made between parts of the water, and space is exhibited as limited by *opposite* surfaces. A firmament, or expanse, is established in the midst of water, so that the opposite surfaces are

¹ Τὸ στερεόν was "the cube." Τὸ σχῆμα στερεόν of the ancient geometer was an abstraction from concrete solidity. Even at present we speak of *Solid Geometry*, plainly because the idea of forms of three dimensions was originally derived from actual solids.

surfaces of water. The inspired writer states the fact as it would have been presented to human eyes; but nothing is said about any process by which the separation was effected. Such a statement would have been unlike everything else contained in the account, which is plainly intended to represent *effects* apart from *operations*, and only so far as they can be comprehended by what is known from ordinary observation. Regarding, however, the facts stated as matters of observation, there is no reason why an attempt should not be made to arrive at precise ideas on the *modus operandi*, by the application of considerations drawn from the physical science of the present day. These will be entered upon in the remarks about to be made on the contents of the next paragraph.

“And God made the firmament: and God separated between the water which was under the firmament, and the water above the firmament¹.” v. 7.

This farther account informs us of a circumstance which did not appear from the terms in which the fiat was expressed, viz. that the firmament was situated be-

¹ Καὶ ἐποίησεν ὁ Θεὸς τὸ στερέωμα· καὶ διεχώρισεν ὁ Θεὸς ἀναμέσον τοῦ ὕδατος ὃ ἦν ὑποκάτω τοῦ στερεώματος, καὶ ἀναμέσον τοῦ ὕδατος τοῦ ἐπάνω τοῦ στερεώματος. In Field's edition, καὶ ἐγένετο οὕτως is added: in others this clause is omitted.

tween water *above* and water *below*. The statement, as now made, may be understood by a matter of common observation: for we see that water in the form of *cloud* is by some means separated by a certain interval from the water of the ocean below. It is true that this account makes no distinction between the two forms of the water. Clouds are not specifically mentioned in the first Chapter of Genesis. But from the phenomenon of rain it is known that they are composed of water, and as their sensible properties are visibility, mobility, and separability into parts, which properties they possess in common with fluid water, the two forms may well be comprehended in the same denomination.

But if it be supposed that the firmament of the second day, and the waters above and below, were phenomena of the same kind as facts that are actually observed at the present time, it must be admitted that there was a difference in degree. The whole surface of the earth was then covered by water (for dry land had not yet appeared), and in consequence of the vast extent of water-surface, and, probably, a high degree of temperature, the region above, it may be presumed, was occupied by a perpetual and continuous stratum of cloud.

It has been already supposed that on the first day a mass of vapour was generated by the action of heat

upon the water, and that being raised into the atmosphere, it was mechanically upheld, resting with its base on the water-surface. This action would at first produce a state of great commotion, which, after the generation of a certain quantity of vapour, would gradually subside into a condition of quietude, during which the caloric action would only have the effect of maintaining the generated vapour as a thick stratum of cloud enveloping the whole earth. It may be conceived that the light of the first day broke forth when this state of quiescence was attained, and that the cloud-stratum was a condition of the earth's luminosity. For reasons that will be presently given, the light may be supposed to have been emitted from the upper surface of the stratum.

The change of physical conditions that marked the commencement of the second day would disturb the uniformity of this arrangement, and put an end to the state of repose favourable to the production of light. A period of darkness would ensue, which at the same time might be a period of activity of forces by the operation of which the waters were separated and the firmament became visible. Since we know from present experience that clouds are sustained by the intervention of the atmosphere, it may perhaps be safely inferred that the particular change which took place at the

beginning of the second day was effected by some alteration of the relations of the atmosphere to the cloud-stratum supposed to be at this time contiguous to the surface of the ocean. A continual, or abrupt, diminution of the temperature, for instance, might so change the relative states and mutual action of the atmosphere and the cloud, that the lower portions of the latter might be condensed and fall into the ocean, and the remainder be permanently sustained in the higher region, just as we see clouds borne up by the air in the present day¹.

“And God called the firmament Heaven: and God saw that it was good².” v. 8.

It was before remarked that the creation of external and visible objects is antecedent to the existence of names. A certain space defined by visible boundaries, but unoccupied by visible matter, is first spoken of descriptively as the firmament. But now God Himself calls it Heaven,—a special name destined to receive far wider application both naturally and spiritually. How

¹ The operation here supposed corresponds to the description in Gen. vii. 11 of the natural causes of the deluge. The waters are said to have had their sources in the “abyss” (i.e. in unperceived depths of the sky, not of the ocean), and to have descended through openings (*καταρρέουσι*) in the sky.

² *Καὶ ἐκάλεισεν ὁ Θεὸς τὸ στερέωμα οὐρανόν· καὶ εἶδεν ὁ Θεὸς ὅτι καλόν.*

frequent and necessary is the use of it in a spiritual sense in the Scriptures! But antecedently its signification must be drawn from the appearances of external objects.

“And evening was, and morning was, the second day¹.” v. 8.

Thus the second day, like the first, consisted of a period of darkness and a period of light. At least, there must have been alternation of darkness and light. But how long the darkness lasted, and what was the duration of the whole day, it is needless to enquire.

It may be supposed for reasons previously given, that darkness commenced when the existing order of things was disturbed by the operation that created the firmament, and that light returned when the intensity of the operation had ceased, and a time of commotion had been succeeded by a state of permanence and repose. But what would then be the source of light? This question applies equally to the interval commencing with the morning of the first day, and to that commencing with the morning of the second. In both the Earth must be regarded as self-luminous, as no extraneous source of light has yet been indicated. We can know little about the conditions under which a large

¹ Καὶ ἐγένετο ἑσπέρα, καὶ ἐγένετο πρωΐ, ἡμέρα δευτέρα.

mass of matter is self-luminous, except what may be gathered from the facts which the telescope reveals to us respecting the aspect of the *Sun*, the only self-luminous body we have the opportunity of scrutinizing. Telescopic observation shews that the Sun is surrounded by visible matter, which floats and whirls, separates and accumulates, and which, therefore, possesses the chief characteristics of *cloud*. The general form of this cloud-like substance is considered to be that of a stratum of large but constant thickness, enveloping the whole body of the Sun, and yet leaving a vacant space between its interior surface and the Sun's surface, the cloud being probably upheld by a solar atmosphere. The Sun's light appears to emanate principally from the upper surface of the stratum¹. Thus the conditions under which the Sun is self-luminous are in several respects the same as those which, guided by the Scrip-

¹ The large Refractor of the Cambridge Observatory, which exhibits with great distinctness the features of the solar spots, together with a mottled and cumulous appearance spread over the whole surface of the Sun's photosphere, has constantly given me the impression that this photosphere is composed of cloud. The phenomena of the spots, which in their general form are cone-shaped openings through the stratum, prove that it is of vast thickness, and that the principal part of the solar light proceeds from its upper surface. A slight but very perceptible shade, spread over the Sun's disk and deepening towards the periphery, is considered to give evidence of the existence of a solar atmosphere.

tural statements, I have ascribed to the Earth as it existed on the second day. The Earth, it is true, is a much smaller body than the Sun; but it is not impossible that the difference of condition in this respect may have been compensated for by a high degree of temperature of the Earth's mass, and a large radiation of heat from the interior, acting upon a vast extent of water. As these causes would, according to the foregoing views, be, at least, as operative on the first day, it may, for like reasons, be supposed that the conditions of self-luminousness were satisfied on that day, although the firmament had not been formed.

“And God said, Let the water which is under the heaven be gathered into one receptacle, and let the dry [land] be seen; and it was so: and the water under the heaven was gathered into their receptacles, and the dry [land] was seen¹.” v. 9.

A very great change in the condition of the Earth's surface is here indicated, which could only have been effected by a disturbance of the orderly and quiescent state which has been supposed to prevail in the latter

¹ Καὶ εἶπεν ὁ Θεός· Συναχθήτω τὸ ὕδωρ τὸ ὑποκάτω τοῦ οὐρανοῦ εἰς συναγωγὴν μίαν, καὶ ὀφθήτω ἡ ξηρά· καὶ ἐγένετο οὕτως· καὶ συνήχθη τὸ ὕδωρ τὸ ὑποκάτω τοῦ οὐρανοῦ εἰς τὰς συναγωγὰς αὐτῶν, καὶ ὤφθη ἡ ξηρά. It is to be noticed that ἡ ξηρά is not followed by a noun.

part of the second day. Hitherto the matter under the heaven has been spoken of as water only, and no mention has been made of any solid portion, this being concealed by the aqueous covering. But now the interior solid part is in some places elevated, and caused to appear above the surface of the water, and in other places depressed to form receptacles for the retiring waters which the upheaving of the land displaces. The terms employed by the sacred writer certainly seem to imply that matter in a form distinct from that of water was already in existence, but was not previously exposed to view. According to the principle maintained throughout this account, it would not be mentioned till it became visible. It is at first referred to only by the quality of *dryness*, that in respect to which it is *the opposite* of water, and it does not receive a *name* till it is stated to have become an object of sight.

There seems to be a contradiction between "one receptacle" in the first part of the verse, and "their receptacles" occurring in the latter part. This apparent discrepancy may be only significant of the fact, that although the ocean is one, and is contained in one receptacle, all its parts being connected, it may yet be regarded as consisting of different portions of water, each of which has its proper receptacle.

Although this account only describes effects, and is silent about means and operations, yet so much as is stated is certainly analogous to facts which the geologist observes, and which he considers to be the consequences of caloric action, or of mechanical forces, in operation many ages ago. Changes of the earth's internal condition, accompanied by paroxysms of caloric action, might cause superficial upheavings and inequalities, which in turn would produce enormous ocean-torrents; and to the union of these actions may be ascribed the elevations of the land at some parts above the general level, forming mountains, continents and islands, and the depressions below the general level at others, forming receptacles for the waters of seas.

"And God called the dry [land] Earth, and the collections of waters He called Seas: and God saw that it was good¹." v. 10.

Here again the Creator gives names to objects which by His power had received observable and distinctive characters. Dry and solid matter is called "earth²,"

¹ Καὶ ἐκάλεσεν ὁ Θεὸς τὴν ξηρὰν, γῆν, καὶ τὰ συστήματα τῶν ὑδάτων ἐκίλεσε θαλάσσας· καὶ εἶπεν ὁ Θεὸς ὅτι καλόν. The plural τῶν ὑδάτων here explains αὐτῶν in the preceding verse.

² More strictly "land," as opposed to water. I have, however, preferred "earth," because this word, like γῆ, is used in the limited sense of "land," as well as in the complex sense of "land and water."

and water, after being collected within limits, and no longer a boundless ocean, is called "sea." The plural "seas" indicates the existence of different *basins*, and that intermingling of land and water with which we are acquainted by present observation.

After this there is no more mention made of names given by God, except the name of Adam (Gen. v. 2). In order that created objects may serve the purpose of instructing and forming the spirit of man, it is necessary that they should receive names; and accordingly the office of naming, the example having been set by the Creator Himself, was delegated to man. Thus we are informed that Adam, after being created in the image of his Maker, put into exercise the faculties which God had given him for this purpose (Gen. ii. 20, 23). All the terms used in the subsequent part of this narrative have had such an origin, and may, therefore, be said to have proceeded indirectly from the Creator, and all are intelligible by facts and objects commonly observed. We shall, however, have occasion to remark, in several instances, that general and *descriptive* terms have been employed in preference to specific names.

"And God said, Let the earth bring forth herb of grass,—that which sows seed according to kind and according to likeness,—and the fruit-tree yielding fruit,

whose seed is in it according to kind, upon the earth : and it was so¹." v. 11.

In accordance with the principle of using an appellation in the sense defined by a previous creative act, the "earth" here means the "dry land," which had been caused to emerge from the depths of the ocean, to be prepared, it may be presumed, by some further process to become a nursery of plants and trees. It may be noticed that the productions which the earth is commanded to bring forth are not merely named as herbs and trees, but are also *described* by certain characteristics. The qualities that are mentioned, are such as we are familiar with by ordinary observation, namely, the distinction between herbs and fruit-bearing trees, the property of producing seed, the difference in kind between different seeds in both classes, and the property which a seed has of reproducing a herb, or tree, in the likeness of that from which it was generated. The expression "upon the earth" indicates that the dry land was designed to be the appropriate locality of herbs and trees.

¹ Καὶ εἶπεν ὁ Θεός· Βλαστήσάτω ἡ γῆ βοτάνην χόρτου, σπείρον σπέρμα κατὰ γένος καὶ καθ' ὁμοίτητα, καὶ ξύλον κάρπιμον ποιῶν καρπὸν, οὗ τὸ σπέρμα αὐτοῦ ἐν αὐτῷ κατὰ γένος [ἐκ ὁμοίτητα] ἐπὶ τῆς γῆς· καὶ ἐγένετο οὕτως. In some editions *ἐκ ὁμοίτητα* is omitted. It may be remarked that the neuter gender of *σπείρον* indicates that a *general* characteristic of plants is here mentioned.

The creation of plants on the third day appears to correspond to the great developement of primæval flora in the *carboniferous* period of Geology¹.

“And the earth brought forth herb of grass,—that which sows seed according to kind and according to likeness,—and the fruit-tree yielding fruit, whose seed is in itself according to kind, upon the earth. And God saw that it was good. And evening was, and morning was, the third day².” vv. 12 and 13.

Although “it was so” was added after the words of the command, the fulfilment is nevertheless expressly asserted by a repetition of the very terms in which the command was given. We may hence infer that the creation is in exact conformity with the *will* and design of

¹ The “*Essayist*” quotes (p. 248) a passage from Hugh Miller’s *Testimony of the Rocks*, in which it is argued that the flora of the carboniferous period did not contain edible plants and fruit-bearing trees. The apparent discrepancy between this fact and the Scriptural statement that herbs and fruit-trees were created simultaneously on the third day, will be best considered in a subsequent part of the Essay, together with other difficulties of a like kind.

² Καὶ ἐξήνεγκεν ἡ γῆ βοτάνην χόρτου, σπέρμα σπέρμα κατὰ γένος καὶ καθ’ ὁμοιότητα, καὶ ξύλον κάρπιμον ποιοῦν καρπὸν, οὗ τὸ σπέρμα αὐτοῦ ἐν αὐτῷ κατὰ γένος ἐπὶ τῆς γῆς· καὶ εἶδεν ὁ Θεὸς ὅτι καλόν. Καὶ ἐγένετο ἑσπέρα, καὶ ἐγένετο πρωΐ, ἡμέρα τρίτη. As *eis* ὁμοιότητα does not occur here before ἐπὶ τῆς γῆς, it seems that it ought to be struck out of verse 12, the two passages being in other respects word for word the same.

the Creator. But solely to teach this is not the reason that *every* act of creation is preceded by a statement of what God *said*, and that the words spoken are repeated in the statement of what God *did*. It cannot be asserted that a mere narrative of the cosmogony would require this repetition; and it is certain, I think, that an uninspired writer would not have presented the narrative under this form. Where all is significant, this characteristic of the writing is significant. An attempt will be made to account for it in a subsequent part of the Essay.

The assertion "and God *saw* that it was good," which is added to the account of the work on each of the days, shews that the different created existences are objects of Divine contemplation, as they are of human contemplation; but the Creator alone, who understands the purposes of all from the beginning, and knows the end of all, sees all to be "good."

Whether or not the "evenings" and "mornings" of the third and succeeding days corresponded to beginnings of *darkness* and *light*, it must be supposed that the limits of the days were marked by alternations of some kind. It is, perhaps, not unreasonable to say, that from time to time changes were effected in the Earth's superficial strata and in the atmosphere by the violent action of physical forces, which for a time produced a

state of commotion and darkness, and that when a new order of things had been induced, quiet and light returned. The facts of Geology do not appear to be contradictory to this supposition.

“And God said, Let there be Luminaries in the firmament of heaven for light to the earth, and to separate between the day and the night, and let them be for signs, and for seasons, and for days, and for years. And let them be for light in the firmament of heaven, so as to shine upon the earth: and it was so. And God made the two great Luminaries, the great Luminary to rule the day, and the lesser Luminary to rule the night: also [he made] the stars. And God placed them in the firmament of heaven, so as to shine upon the earth, and to rule the day and the night, and to separate between the light and the darkness: and God saw that it was good. And evening was, and morning was, the fourth day¹.” vv. 14—19.

¹ Καὶ εἶπεν ὁ Θεός· Γενηθήτωσαν φωστῆρες ἐν τῷ στερεώματι τοῦ οὐρανοῦ εἰς φαῦσιν τῆς γῆς, καὶ διαχωρίζειν ἀναμέσον τῆς ἡμέρας καὶ ἀναμέσον τῆς νυκτός· καὶ ἔστωσαν εἰς σημεῖα, καὶ εἰς καιροὺς, καὶ εἰς ἡμέρας, καὶ εἰς ἔνιαυτούς. Καὶ ἔστωσαν εἰς φαῦσιν ἐν τῷ στερεώματι τοῦ οὐρανοῦ, ὥστε φαίνειν ἐπὶ τῆς γῆς· καὶ ἐγένετο οὕτως. Καὶ ἐποίησεν ὁ Θεὸς τοὺς δύο φωστῆρας τοὺς μεγάλους· τὸν φωστῆρα τὸν μέγαν εἰς ἀρχὰς τῆς ἡμέρας, καὶ τὸν φωστῆρα τὸν ἑλάσσον εἰς ἀρχὰς τῆς νυκτός· καὶ τοὺς ἀστέρας. Καὶ ἔθετο αὐτοὺς ὁ Θεὸς ἐν τῷ στερεώματι τοῦ οὐρανοῦ, ὥστε φαίνειν ἐπὶ τῆς γῆς, καὶ ἀρχειν τῆς ἡμέρας καὶ τῆς νυκτός, καὶ διαχωρίζειν

This account indicates that a great change had taken place either in the earth's atmosphere, or in the amount of cloud sustained in it. As the separation between light and darkness is now made by external luminaries, it follows that the Earth had ceased to be self-luminous. The epoch at which this took place may be regarded as the commencement of the fourth day, and a subsequent epoch, at which the Sun, Moon, and Stars became visible, as the morning of that day. From what has previously been argued from the Scriptural account, it may be supposed that the termination of self-luminousness was owing to a diminution of the cloud-stratum, caused by depression of temperature and consequent precipitation of vapour, and that this process went on till at length the stratum was so thinned and broken up, that it no longer veiled the luminaries of heaven from sight. According to the principle of this narrative, their existence would not be recognised till they became visible, or produced sensible effects. The purposes for which it is stated that the Sun and Moon (which, be it observed, are not specifically named) were created, are just those which are known by common observation and experience at the present time. The "firmament of heaven," as we have already argued,

*ἀναμέσων τοῦ φωτός καὶ ἀναμέσων τοῦ σκότους· καὶ εἶδεν ὁ Θεὸς ὅτι καλόν.
Καὶ ἐγένετο ἑσπέρα, καὶ ἐγένετο πρωΐ, ἡμέρα τετάρτη.*

means generally all that space external to the earth which is rendered sensible by visible objects. Hence as new and more distant objects are seen, the limits of the firmament are extended. Accordingly the Sun, Moon, and Stars are placed in the firmament¹.

Although from this time the natural day is marked by the setting and rising of the Sun, the days of creation must still be considered to be limited by the same kind of alternation as that by which they were limited previous to the fourth day.

The physical condition of the earth previous to the fourth day has been supposed to be such that light and heat were supplied independently of extraneous sources by a thick stratum of cloud upheld in the atmosphere.

¹ The "Essayist" says (p. 220) that "the Hebrews understood the sky, firmament, or heaven, to be a permanent solid vault, as it appears to the ordinary observer." Whatever the Hebrews may have understood, the *Scriptures* give no countenance to that idea. The texts quoted by the author do not support his assertion, because the "foundations," "pillars," "doors," and "windows" of heaven, are spoken of without any reference to a "solid vault," and can be taken in no other than a metaphorical sense. The sun and moon, which, as seen by the ordinary observer, are constantly changing their *relative* positions, are yet placed in the firmament, and even birds are said to "fly above the earth in the open firmament of heaven" (Gen. i. 20, A. V.). How then could the firmament be imagined to be a permanent solid vault? These statements are consistent with each other if "the firmament" be understood to mean all the space external to the earth, so far as it is cognisable by visible objects.

Under these circumstances the distribution of temperature over the Earth's surface would be much more equable than it is at present, the superficial temperature now being greatly dependent on the heat which accompanies the luminous rays transmitted from the Sun. The more equable temperature would also be much greater in degree, otherwise the unequal distribution of solar heat, which must be supposed to coexist, would have disturbed its uniformity. This higher and more uniform temperature prevailed, it may be supposed, on the third day at the epoch of the generation of herbs and trees, till at length on the fourth day the Sun became the chief source of light and heat, and regulated the *seasons*¹.

The process by which the above-mentioned change of physical condition was effected may have been of the following kind. The forces concerned in producing the successive revolutions which, according to the deductions

¹ The antecedent uniform condition of the earth's surface as to light and temperature appears to be confirmed by geological researches. In Murchison's *Siluria* (p. 505, 3rd. ed.) the following statement occurs: "This earliest luxuriant tree-vegetation, the pabulum of our coal-fields, is also specially remarkable for its spread over many latitudes and longitudes; and together with it occur the *same common species* of marine shells, all indicating a more or less equable climate from polar to inter-tropical regions,—a phenomenon wholly at variance with the present distribution of animal and vegetable life over the surface of the planet."

of geology, the earth's crust underwent, may have altered at the same time by degrees the relative proportions of the vaporous and atmospheric matter to the fluid and solid parts, till at length the thick and continuous canopy of cloud that at one time surrounded the earth, was reduced to the broken and irregular distribution of cloud which we now witness. Even the uniformity of the cloud-stratum that surrounds the body of the Sun is interrupted by *breaks* presenting the appearance of spots, and the remarkable variability of the light of certain stars may well be attributed to a phenomenon the same in kind but greater in degree. The clouds of planetary bodies are still more irregular and interrupted. Thus there is now existing in different bodies that gradation of the phenomena of the cloud-stratum, which, according to our views, the clouds of the earth underwent by course of time. The transition from the continuous to the discontinuous state, would, as already said, mark the epoch at which the Sun, Moon, and Stars first became visible to a supposed spectator at the earth's surface.

But Scripture states that God *made* the two great Luminaries and the Stars on the fourth day, not that they only became visible at that time, being previously in existence; while on the other hand the science of Astronomy would lead to the inference that the earth,

being one of the bodies of the solar system, was not created before the others. This and other apparent discrepancies between Scripture and Science, which will receive due attention in the sequel, will be best considered collectively, after the present discussion of the physical signification of the accounts of the creations on the several days is concluded.

“And God said, Let the waters bring forth creeping things having living souls, and flying things that fly upon the earth in the firmament of heaven: and it was so. And God made the great whales, and every soul of creeping animals, which the waters brought forth according to their kinds, and every winged flying thing according to kind: and God saw that they were good. And God blessed them saying, Increase and multiply and fill the waters in the seas; and let flying things be multiplied on the earth. And evening was, and morning was, the fifth day¹.” vv. 20—22.

¹ Καὶ εἶπεν ὁ Θεὸς· Ἐξαγαγέτω τὰ ὕδατα ἑρπετὰ ψυχῶν ζωσῶν, καὶ πετεινὰ πετόμενα ἐπὶ τῆς γῆς κατὰ τὸ στερέωμα τοῦ οὐρανοῦ· καὶ ἐγένετο οὕτως. Καὶ ἐποίησεν ὁ Θεὸς τὰ κτήνη τὰ μεγάλα, καὶ πᾶσαν ψυχὴν ζῶσαν ἑρπετῶν, ἃ ἐξήγαγε τὰ ὕδατα κατὰ γένη αὐτῶν, καὶ πᾶν πετεινὸν πτερυγῶν κατὰ γένος· καὶ εἶδεν ὁ Θεὸς ὅτι καλὰ. Καὶ ἡλόγησεν αὐτὰ ὁ Θεός, λέγων· Αὐξάνεσθε καὶ πληθύνεσθε, καὶ πληρώσατε τὰ ὕδατα ἐν ταῖς θαλάσσαις· καὶ τὰ πετεινὰ πληθυνέσθωσαν ἐπὶ τῆς γῆς. Καὶ ἐγένετο ἑσπέρα, καὶ ἐγένετο πρωΐ, ἡμέρα πέμπτη. The idea conveyed by κατὰ τὸ στερέωμα is, ‘according as the firmament gives scope for flying.’

In this announcement of the first creation of animals, the characteristics most prominently mentioned are the *principle of life* and the power of *moving*, which in fact are those most obvious to common observation. The terms used are of a general nature, and *describe* rather than *specify*. The only two classes of living creatures spoken of in the fiat are those that creep (reptiles), and those that fly. As birds¹ are not specifically named, every kind of flying animal is included. Although the word "fishes" does not occur in this account, it is evident from the command "to fill the waters in the seas," that they are *classed* with the creations of the fifth day. They appear to be put in a somewhat different category from that of reptiles and flying creatures. "The great whales" are mentioned with more specification than any of the creatures generated either on the fifth, or the sixth day, except man. (An attempt will be made in the proper place to give a reason for this.) It is not, however, necessary to suppose that only one class of marine animals is signified. When "the waters" are said to bring

I have, therefore, translated *κατά* by 'in,' this translation agreeing also with that of the Authorised Version from the Hebrew.

¹ Instead of *ὄρνις* or *ὄρνειον*, the word is *πτερόν*, a thing that flies. In the above passage *ἑρπετόν* is not an animal that moves in any manner, for then it would include quadrupeds, but an animal that creeps—a reptile.

forth living beings at the command of God, it is, in the first place, indicated that the genesis of animals is an act purely creative, because we can, of our own knowledge, pronounce, that in water, as such, there are no means of naturally giving birth. Also it is implied that the *material* of which the living creature is composed is of the same kind of material as the earth, as Adam is said to have been formed of the dust of the ground. And again, the *waters* are commanded to bring forth to distinguish this creative act from that of the sixth day, on which the *land* is in like manner commanded to bring forth animals of quite a different class.

The creations of the fifth day have an analogy to the great developement of animal life, particularly of enormous reptiles¹ and flying creatures (Pterodactyls)

¹ According to the "Essayist" (p. 239), the Scripture assigns the creation of reptiles *exclusively* to the sixth day, whereas the word *éproué* (reptiles) occurs *twice* in the account of the creations of the fifth day. It may be admitted, without contradicting the Scripture account, as will be shewn hereafter, that *marine* reptiles and fishes, and generally inhabitants of the waters, existed long before the feathered tribe and mammals. The "Essayist" adds: "There remains, moreover, the insuperable difficulty of the plants and trees being represented as being made on the third day—that is, more than an age before fishes and birds." It is true that fishes existed anterior to the carboniferous epoch, but I can find no geological evidence that contradicts the statement that winged animals did not exist till more than an age after that epoch. And with respect to fishes, it is worthy of all remark that although

in the Secondary period of the Geologist. The evidence that birds, i.e. the *feathered* tribe of animals, were of so ancient a date is questionable. Between the carboniferous epoch and the epoch of that developement, a long interval intervened not apparently marked by any similar large generation of organisms. In that interval, as might be gathered from the Scripture account, the physical condition of the atmosphere must have gone through changes preparatory to its adaptation to the habits and requirements of the life of air-breathing animals. Fishes and invertebrate animals, according to geological evidence, abounded in the seas at a date prior even to the carboniferous epoch. But Cetaceans, which may perhaps be regarded as the grandest developement of the marine class of animals, are considered to belong to the Tertiary period¹. And in the Scriptural account they are mentioned apart from the reptiles and flying creatures of the fifth day, while at the same time they are separated from the mammals which the *land* brought forth on the sixth day.

their existence on the fifth day is recognised, they are neither named by a *common* appellation, nor are they represented as being *created generally* on that day. Creation is affirmed of only a certain class of large individuals, "the great whales."

¹ "Remains of Oolitic reptiles have been mistaken in more than one instance for those of Cetacea; but it is now generally held that the earliest known specimens of the family belong to the Tertiary ages." Hugh Miller, *Testimony of the Rocks*, p. 79.

"And God said, Let the earth bring forth the living soul according to kind, quadrupeds, and creeping things, and beasts of the earth, according to kind: and it was so. And God made the beasts of the earth according to kind, and the cattle according to kind, and all the creeping things of the earth according to their kind; and God saw that they were good¹." vv. 24 and 25.

The work of the sixth day is the creation of animals that inhabit the land. Their birth is from the earth, as that of the creatures formed on the fifth day was from the waters. A material origin is thus assigned to all; but no process of generation is indicated. The different forms of the material, water and earth, refer, not so much to place of habitation, as to difference of genera, as we have already argued. There may also be reference to an *order* in creation. As water was at first the prevailing element, and afterwards the solid earth appeared, so the first created animals have their origin ascribed to water, while the last created and more

¹ Καὶ εἶπεν ὁ Θεὸς· Ἐξαγαγέτω ἡ γῆ ψυχὴν ζῶσαν κατὰ γένος, τετράποδα καὶ ἑρπετὰ καὶ θηρία τῆς γῆς κατὰ γένος· καὶ ἐγένετο οὕτως. Καὶ ἐποίησεν ὁ Θεὸς τὰ θηρία τῆς γῆς κατὰ γένος, καὶ τὰ κτήνη κατὰ γένος, καὶ πάντα τὰ ἑρπετὰ τῆς γῆς κατὰ γένος αὐτῶν· καὶ εἶδεν ὁ Θεὸς ὅτι καλὰ. Here *ἑρπετὰ*, being classed with land-animals, are reptiles without feet, *διποδα*.

perfect are produced from earth, whence also man was formed. This order in the creation of things inanimate and animate is not without ulterior signification.

A distinction is made between "beasts" and "cattle," the latter being tame animals more immediately serviceable to man, while the other kind are formed for rapacity and destruction. Yet in the sight of their Creator both kinds are "good." The reptiles of this day are distinguished as to class from those of the fifth day by being called "reptiles of the earth."

This creation of land animals on the sixth day corresponds to the abundance and great development of mammals and quadrupeds in the Tertiary period of Geology,—that immediately preceding the creation of man. Among "the reptiles of the earth" it is probable that *serpents* are to be included¹.

"And God said, Let us make man according to our image and according to likeness; and let them have dominion over the fishes of the sea, and the fowl of heaven, and the cattle, and all the earth, and over all the creeping things that creep upon the earth. And God made man; according to the image of God He made him, male and female He made them. And God blessed them, saying, Increase, and multiply, and fill

¹ Hugh Miller, *Testimony of the Rocks*, p. 82.

the earth, and subdue it, and rule the fishes of the sea, and the fowl of heaven, and all the cattle, and all the earth, and all the creeping things that creep upon the earth¹." vv. 26—28.

We have now come to the completion of the creation in man, for whose sake all the objects that have hitherto been mentioned were expressly created. This may be inferred from the dominion which is conceded to him over all created things, animate and inanimate². It is particularly to be remarked that the appellation "man" is here generic, and that the dominion spoken of is, in part, that which we see the race of men actually exercising over the rest of creation. This, which is at present a visible power over material objects, is the

¹ Καὶ εἶπεν ὁ Θεός· Ποιήσωμεν ἄνθρωπον κατ' εἰκόνα ἡμετέραν καὶ καθ' ὁμοίωσιν· καὶ ἀρχέτωσαν τῶν ἰχθύων τῆς θαλάσσης, καὶ τῶν πετεινῶν τοῦ οὐρανοῦ, καὶ τῶν κτηνῶν, καὶ πάσης τῆς γῆς, καὶ πάντων τῶν ἑρπετῶν τῶν ἐρπόντων ἐπὶ τῆς γῆς. Καὶ ἐποίησεν ὁ Θεὸς τὸν ἄνθρωπον, κατ' εἰκόνα Θεοῦ ἐποίησεν αὐτὸν, ἄρσεν καὶ θῆλυ ἐποίησεν αὐτούς. Καὶ ἠύλγησεν αὐτοὺς ὁ Θεός, λέγων, Αὐξάνεσθε καὶ πληθύνεσθε, καὶ πληρώσατε τὴν γῆν, καὶ κατακυριεύσατε αὐτῆς, καὶ ἄρχετε τῶν ἰχθύων τῆς θαλάσσης, καὶ τῶν πετεινῶν τοῦ οὐρανοῦ, καὶ πάντων τῶν κτηνῶν, καὶ πάσης τῆς γῆς, καὶ πάντων τῶν ἑρπετῶν τῶν ἐρπόντων ἐπὶ τῆς γῆς. It is to be noticed that *ἄνθρωπον* here does not signify an individual, but the race or genus, being followed by the plural verb, *ἀρχέτωσαν*. A general appellation for fishes (*ἰχθύες*) occurs for the first time in this passage.

² It may be observed that beasts (*θηρία*) are not mentioned by name in verses 26 and 28, nor in the reference made to this passage in Psalm viii.

antecedent representative of the future subjugation of the whole external world to the Son of Man, and, in Him, to man himself, when his *spiritual* creation is completed. "But now we do not yet see all things put under him" (Heb. ii. 8).

The most remarkable part of the announcement of this creation is the sentence, "Let *us* make man according to our image." As the considerations relating to the creation of man in the image of God are of a more *doctrinal* character than those which have hitherto occupied us, I propose to devote to them a separate section, and shall, therefore, not pursue this subject farther at present.

The blessing (in v. 28) is like that pronounced on the animals created on the fifth day, with the addition that to man is given dominion. It is worthy of remark that after the deluge God blessed Noah and his sons in nearly the same words as those in which the blessing is pronounced on the sixth day of creation. (See Gen. ix. 1, 2.) This shews that the original blessing extended to the whole future history of mankind, and that the sense in which it was fulfilled in the descendants of Noah was that in which it was originally intended to be fulfilled. The repetition of the blessing after the previous great destruction of human life, significantly intimates the prevalence of the blessing

over the curse, and its ultimate and permanent establishment in that extended sense which is spoken of by the Apostle Paul in Heb. ii: 6—9.

“And God said, Behold, I have given you every seeding herb,—whatever is seed-sowing upon the face of all the earth,—and every tree which has in itself seed-sowing fruit; to you it shall be for food. And to all the beasts of the earth, and to all the fowls of heaven, and to every creeping thing that creeps upon the earth, which has in itself a living soul, also [I have given] every green herb for food: and it was so¹.” vv. 29 and 30.

In this ordinance for making provision for the continued existence of man upon the earth, especial mention is made of that wonderful property in herbs and trees of reproduction, by means of which the provision is *perpetuated*. It may also be remarked that while to man are given seed-bearing herbs and fruit-bearing trees, the food assigned to the other animals is simply described as the *green herb*.

¹ Καὶ εἶπεν ὁ Θεός· Ἴδού δέδωκα ὑμῖν πάντα χόρτον σπόριμον, σπείρον σπέρμα, ὃ ἐστὶ ἐπάνω πάσης τῆς γῆς, καὶ πᾶν ξύλον, ὃ ἔχει ἐν ἑαυτῷ καρπὸν σπέρματος σπορίμου, ὑμῖν ἐστὶ ἐν βρώσῃ· καὶ πᾶσι τοῖς θηρίοις τῆς γῆς, καὶ πᾶσι τοῖς πετενοῖς τοῦ οὐρανοῦ, καὶ παντὶ ἐρπετῷ τῷ ἐρποντι ἐπὶ τῆς γῆς, ὃ ἔχει ἐν ἑαυτῷ ψυχὴν ζῶης, καὶ πάντα χόρτον χλωρὸν ἐν βρώσῃ· καὶ ἐγένετο οὕτως.

At first sight this passage appears only to assert that God made provision for the bodily sustenance of man and animals. But when the terms in which it is expressed are closely considered, it will be seen that though it means this inclusively, it means more than this. Taken in its literal sense, it states that *every* herb and *every* tree were given for food. The terms employed seem expressly to say that all without exception were intended to furnish food: whereas, according to experience, *some* herbs and *some* trees are proper for this purpose and others not so¹. The attempt to account for the terms of this statement, will be most conveniently made when we have under consideration the formation of man in the image of God.

The last verse of the Chapter (v. 31), in which it is emphatically said that every thing which God had made was "very good," will also be treated of in a separate section, because the discussion of it will necessarily involve doctrinal considerations.

We have now gone through the explanations of the Scripture Cosmogony, and compared to a consider-

¹ The author of the "Essay" notices this apparent difficulty (p. 220), and adduces the explanation that "there is no vegetable production which may not possibly be useful to man." But the Scriptural statement is, that all were given for *food*.

able extent the statements it contains with results of modern science. We have found that while there is a general accordance in some things, in others there is disagreement. This is no more than might have been anticipated, because the comparison could not be fully made, and the degree of accordance be judged of, till another and a very important matter¹ be taken into account, which has been reserved for consideration apart from the rest of the argument. After the mention made in Gen. ii. 2, 3 of the completion of the work in six days, and the cessation from work on the seventh day, there follows this summary of the whole preceding account. "This is the book of the generation of heaven and earth at the time it took place, on the day that the Lord God made the heaven and the earth, and every plant of the field before it was on the earth, and every herb of the field before it grew: for the Lord God did not send rain upon the earth, and there was not a man to till the ground²." These words, which at first view appear enigmatical, will on

¹ This has been alluded to in the Introduction (p. 13).

² Αὕτη ἡ βίβλος γενέσεως οὐρανοῦ καὶ γῆς ὅτε ἐγένετο, ἡ ἡμέρα ἐποίησε Κύριος ὁ Θεὸς τὸν οὐρανὸν καὶ τὴν γῆν, καὶ πᾶν χλωρὸν ἀγροῦ πρὸ τοῦ γενέσθαι ἐπὶ τῆς γῆς, καὶ πάντα χόρτον ἀγροῦ πρὸ τοῦ ἀνατάλλαι· οὐ γὰρ ἔβρεξε Κύριος ὁ Θεὸς ἐπὶ τὴν γῆν, καὶ ἄνθρωπος οὐκ ἦν ἐργάζεσθαι τὴν γῆν. Gen. ii. 4, 5.

consideration be found to signify, that this "book" gives an account of the creation as it was in *plan* or *design*, not as *executed*. What other meaning can there be in saying that every plant was made before it was on the earth, and every herb before it grew? To render this sense the plainer, it is added that the Creator did not "cause it to rain on the earth," nor was there a man to till the ground. There was as yet no *operation* either of nature, or by the hand of man, and consequently no operation of any kind. The statement that there was not a man to till the ground appears contradictory to the previous account of the creation of man on the sixth day, unless the whole of this Cosmogony be regarded as a *scheme* of the creation, formed in the Divine Mind antecedently to the visible unfolding. It is essential to every *work*, that there be design as well as execution. The works of God, as understood by us, do not in this respect differ from human works; but as comprehended by the great Creator Himself, the plan is the same thing as the execution,—the beginning and the end are one,—because with Him time is not an element which separates between them. "One day is with the Lord as a thousand years, and a thousand years as one day" (2 Pet. iii. 8). This in fact is indicated in the very passage we are considering, in which, although the

creation had been described as occupying six days, it is yet spoken of as collectively accomplished on a certain day,—at a certain point of time.

This argument may serve to shew that it is unnecessary, and would be altogether inappropriate, to assign to each of the days of creation a definite interval, as twenty-four hours. The parts of a scheme may be antecedently conceived of, and described, in a certain order by reference to marks of time, but the *relation* to epochs and intervals is concurrent only with the execution.

The recognition of the operation of natural causes is first made in verse 6 of Chap. ii., which is the beginning of a narrative different¹ in kind from that which preceded, inasmuch as it speaks of continuous physical action, and of events that took place in course

¹ The author of the "Essay" notices (p. 217) that there are two distinct accounts, but has not explained in what respect they differ. He is also in error when he supposes that the second account commences at verse 4. Verses 4 and 5, beginning with *αὐτῇ ἡ βίβλος*, contain, as we have argued above, a summary of the preceding narrative and a statement of its principle, and at verse 6 commences an *historic* account of natural facts and creative operations. So also *αὐτῇ ἡ βίβλος* at the beginning of Chap. v. refers to the history which precedes, not to that which follows. At the beginning of Chap. x. *αὐται δὲ αἱ γενέσεις* refers to the narrative that follows, as the particle *δὲ* shews; but *αὐται αἱ φύλαι* in the last verse of that Chapter certainly applies to the same narrative, and therefore to one that precedes.

of time. This second narrative commences thus: "Now a mist ascended from the earth, and watered all the face of the earth¹." These few words refer to that operation of nature which is the most essential for supporting life. The mist which everywhere rises from land and water engenders rain, which being scattered over the earth's surface, causes herbs and trees to grow for the sustenance of animals and man. It seemed good to the Holy Spirit, after this brief allusion to the execution of that part of the design of the Creator which provided for life and growth, to pass immediately to the history of the actual creation in time of the first human pair, and of subsequent events. Nothing is said about any antecedent history of the classes of animals which in the order of creation preceded man. That they had a history has been established, not by the Scriptures, which were written for other purposes, but by records, equally written by the finger of God, which have been preserved in hills and valleys, and inscribed on rocks, and have been read only in very recent times.

Still if the view that has been taken above of the character of the Scriptural account of the creation be

¹ Πληγὴ δὲ ἀνέβησαν ἐκ τῆς γῆς, καὶ ἐπόρευε πᾶν τὸ πρόσωπον τῆς γῆς (Gen. ii. 6). The particle δὲ is here put at the beginning of a narrative just as in Gen. i. 2.

true, it may be legitimately inferred from Scripture itself that there was an historic period of long duration antecedent to the creation of man. This inference may be drawn as follows. Let it be admitted that what is recorded in Chap. i. 26—30 is a proleptical statement of the design of the Creator relative to the whole human race; then what we see at the present time, or is matter of history, is the process of carrying out that design. This appears to be the view taken by St Paul in Heb. ii. 8, where, after quoting Psalm viii., which contains an amplification of Gen. i. 26—30, he adds the remarkable sentence, which has been already referred to, "But now we do not yet see all things put under him." Thus there is a work in *progress*, which, as the same apostle teaches (1 Cor. xv. 27), will eventually be consummated in and through the Son of Man. Consequently as an historic period of long duration corresponds to the creation of man on the sixth day, it seems reasonable to conclude that corresponding to the creations which in the order of the scheme precede this, there were also antecedent historic periods of long but unknown duration. It is the province of Geology to enquire into that history, and to endeavour to determine its epochs.

The foregoing arguments all lead to the conclusion that the Scriptural account of the creation is not a

narrative of facts¹, but a communication to us of the scheme of the creation as framed originally in the mind of the Creator. This view of it seems to give a reason for the characteristic we have already noticed, namely, the speaking of objects descriptively rather than by their ordinary names, which, on the supposition of a mere narrative, is hardly to be accounted for. The scheme, it is true, is given in a narrative form, and by reference to successive intervals of time. But, on the other hand, it does not appear that a descriptive account of a scheme intended to be unfolded in course of time, could be communicated to us in a different form. The enumeration of days serves the purpose of presenting the parts in a certain order, which, quite irrespective of the lengths of the days, may correspond with the order of developement. "It was so" is added after "God said," to shew that as regards the Creator the purpose and the performance are not separated by time. It is in respect to *us* only that the element of time comes in. Hence that assertion does not signify the accomplishment historically of the expressed purpose. This we may certainly infer from

¹ The "Essayist" (p. 223) regards it as "a plain statement of facts," and such, no doubt, it appears to be on a *cursory* reading. But when the statements are well considered, they are found to contain much that is far from being "plain."

the teaching of St Paul in Heb. iv. 3, where he contrasts a passage in the Psalms which speaks of God's rest, that is, cessation from work, as still future, with the passage in Genesis, which states that God ceased from all his works on the seventh day. The apostle remarks respecting the former assertion that it is made "although the works were finished from the foundation of the world¹." This word "although" is conclusive as to the two-fold view of the creation taken in Scripture,—that which regards it as completed in purpose from the beginning, and that which regards it as being at present in course of accomplishment. It is evident that the apostle recognised a completion of the works distinct from that which is brought about by course of time, and we may accordingly regard his doctrine as an authoritative explanation of the "It was so" which is repeated after the description of each successive step in the creation, and which is finally placed at the end of the account given of the work of the sixth day.

The argument is now brought to this stage. In the course of the explanations that were given of the Scriptural account of the Cosmogony, comparisons were made with geological and astronomical facts on the sup-

¹ Καίτοι τῶν ἔργων ἀπὸ καταβολῆς κόσμου γενηθέντων.

position that that account was a simple narrative, and it was found that there were points of apparent disagreement. Then by comparing this with other parts of the Bible, on the principle that the Scriptures are to be regarded as a whole and as dictated by One Mind, it was ascertained that though this portion is in a narrative form, it is not strictly a narrative, but rather a communication from the Holy Spirit (to whom the counsels of the Creator were known from the beginning) of the original plan of the whole creation. A building in plan is not the same thing as a building in execution, neither can a description of the former be the same as the description of the latter, although there must be a certain correspondence between the one and the other. We have, therefore, now to consider in what respects the results of the above mentioned comparisons are modified, when the *à priori* character of this exordium to the Scriptures is taken into account. In doing this, I shall first endeavour to give a succinct statement of the points both of agreement and disagreement, and then, I think, it may be shewn that the latter disappear as soon as it is recognised that Scripture gives an account of the building in plan, and Geology of the building in execution.

Scripture and Geology agree in indicating an *elaboration* of the Earth's surface, by successive stages, from

a simple primæval state, in which water appears to have been the predominant element, to that configuration of sea and land, and condition of the materials of the latter, of which we are now witnesses. According to the most approved geological views, this elaboration was effected by alternations of violent commotion, and of the quiet kind of action which is observed at present to be taking place on the earth's surface,—of paroxysms of mechanical force occupying comparatively short intervals, and gentler operations spread over long intervals,—of times of confusion and disorder and times of repose. Without professing to have a deep acquaintance with the science of Geology, I venture to express the opinion that geological facts give clear evidence of *both* kinds of operation. This alternate action which the earth's surface underwent by successive gradations more or less abrupt, seems to correspond to the partition of the Scripture Cosmogony into days having evening and morning. Evening, which introduces night, may answer to the beginning of a time of violence and confusion attended by a withdrawal of light, and morning, which introduces day, may answer to a return of quietude and light. Geology seems to shew that there were many such alternations in the earth's early history, differing as to the extent of surface over which they spread, and the intensity of the mechanical action by which they were

effected, the agency in some being heat, in others water ; some being principal, and others subordinate. The deluge appears to have been a final subordinate catastrophe by water, with which the Author of all these revolutions thought good to visit the earth after it had been long peopled by the human race. It may not be possible to refer with any precision the days of the Scripture Cosmogony to periods of geological revolution, more especially the first two days ; yet it cannot be denied that there is a general accordance, as to *kind* and *order*, between the changes stated or implied in Scripture, and those which Geology has revealed. The Scriptural statements of the creative acts performed during the last four days, seem to be consistent with the changes of terrestrial conditions which, according to Geology, took place in the interval extending from the era of igneous rocks to the end of the Tertiary deposits. The Tertiary period answers to the sixth day, the time of the Secondary formations to the fifth, the limestone and carboniferous period to the end of the third day. Between the two last periods an interval occurs, during which changes of terrestrial and atmospheric conditions must have been effected, which prepared the earth for inhabitation by the classes of animals that abounded during the secondary and tertiary periods. This interval corresponds to the fourth day. Now according to

the Scripture account, it is not till the fourth day that the Sun illumines the earth and its heat determines *seasons*. From this statement it was argued that antecedently the earth was self-luminous, and consequently that terrestrial temperature was in the main independent of extraneous sources. And certainly it must be regarded as a point of agreement with this deduction from Scripture, that geological facts give evidence of the prevalence of a more equable temperature from the polar to the tropical regions in the carboniferous period than that which exists at the present time¹. This argument receives support from the fact, already adverted to, that the circumstances, as shewn by the Telescope, under which the Sun is self-luminous, are not in disaccord with those which, according to the indications of the Sacred Record, prevailed at the earth's surface on the second and third days.

As we found points of agreement between Scripture and Science with respect to the processes of elaborating the Earth for the reception and maintenance of plants and animals, so there are points of agreement between the Scriptural account of the creation of these organisms and the records which have been left of them in geological remains. First, it may be inferred from Scripture

¹ See the quotation from Murchison's *Siluria* in p. 42.

that there was a period in the earth's history in which there were neither plants nor animals, and that these were generated when the mechanical processes which the earth's crust underwent, had prepared for them the means of life and growth, and fit habitations. Thus plants were created on the third day after the dry land had been caused to appear, and air-breathing vertebrate animals, reptile and winged, were generated on the fifth day, when, as may be presumed, the condition of the atmosphere, and the influence of solar heat, had approximated to what they are now. There were, according to this account, *beginnings* of organizations, and not indefinitely prolonged series: and this is the conclusion to which the observation of fossil remains has led geologists, who speak of Azoic and Palæozoic epochs, and of successive generations of distinct organic types¹.

¹ This assertion rests on the following authorities. "The hypothesis that all the earliest sediments have been so altered as to have obliterated the traces of any relics of former life which may have been entombed in them, is opposed by examples of enormously thick and often finely levigated deposits beneath the lowest fossiliferous rocks, and in which, if many animal remains had ever existed, more traces of them would be detected." (Murchison's *Siluria*, p. 20, 3rd Ed.) "The Silurian rocks extend over areas as large as, if not larger than, any great system of the following periods; and yet in them alone is there an entire absence of an arborescent vegetation derived from the then adjacent lands." (Ibid. p. 522.) "There appear no traces of a *terrestrial* vegetation until we reach the uppermost beds of the Upper Silu-

Again, the *order* of the recorded creations, viz. first plants, then in one category, reptile and winged animals and fishes, then quadrupeds wild and tame, and lastly man, is for the most part that in which it has been inferred from Geology that these different kinds of organization made their appearances. (Exceptions to this statement will be presently considered.) Geology, it is true, has also revealed the existence of other organic forms, as encrinites, molluscs, trilobites, and various invertebrate animals, which lived in great abundance

rian System." (Hugh Miller, *Testimony of the Rocks*, p. 9.) "The oldest known reptiles appear just a little before the close of the Old Red Sandstone, just as the oldest known fishes appeared just a little before the close of the Silurian System." (Ibid. p. 76.) "As a matter of fact, there is an enormous organic interval between the *fauna* of the cretaceous period and of the lower Tertiary deposits." (Sedgwick's *Discourse*, p. cxviii.) Lyell speaks of a "marked discordance in the fossils of the Tertiary as compared with the cretaceous formations," and admits, although inclined to the doctrine of consecutive series, that certain "newly-discovered records, some of which are closely allied to the eocene, and others to the cretaceous type, do not fill up the wide gap." (*Manual of Geology*, pp. 235 and 236.) The same author places the earliest evidence of the existence of birds in the lower eocene period, or that of London clay. He omits, and perhaps rightly, the evidence from foot-prints. (Ibid. p. 460.) "With the Stonesfield slates,—a deposit which lies above what is known as the Inferior Oolite,—the remains of mammaliferous animals first appear." These are considered to be of the marsupial order. "No other mammalian remains occur till after the close of the Secondary Division." (Hugh Miller, *Testimony of the Rocks*, p. 90.)

before the period of plants. But as these primitive and incipient types are either comprehended in later developments, or are such as could not be known by common observation, no reference is made to them in the Scripture cosmogony.

From Geology it appears that there was an enormous developement of Flora in the carboniferous period, greatly exceeding the amount of like productions in the same interval both before and after. Again, in the Secondary period there was a developement of animal life remarkable as to form and magnitude, which surpassed by far any previous or subsequent generation of like species, and in the Tertiary period there was a similar large developement of gigantic species of quadrupeds. The organic productions of these three epochs stand out prominently from the rest; and certainly it must be considered as a point of agreement with this fact, that in the Scripture account only *three* epochs of the generation of organized bodies are mentioned, those of the third, fifth, and sixth days.

We have now to notice points of disagreement, the Scriptural account being still regarded as a narrative. Read as such it seems to tell us that herbs and fruit-bearing trees came simultaneously into existence at a certain epoch, then two ages after (the days being considered to be ages), reptile and winged animals and

fishes, and after another age, quadrupeds. It is a natural inference from these statements that there were no animals between the first and second of these epochs, and no quadrupeds between the second and the third. Whereas, according to Geology, fishes appeared a little before the close of the Silurian System, and therefore long before the coal formations, and reptiles began to appear a little before the close of the Old Red Sandstone, and therefore still previously to the same epoch. Birds are not found to be contemporary with reptiles; and the remains of quadrupeds occur in deposits earlier than the Tertiary¹. Also plants have been discovered of as early a date as the Old Red Sandstone, and fruit-bearing trees do not belong to the carboniferous period.

The hypothesis that the revolutions and catastrophes which the Earth's surface underwent subsequently to the creations of the fifth day, might have embedded the remains of animals of that epoch in the materials of older strata and rocks, is inadmissible, because it appears that the earliest remains of fishes and reptiles are of quite distinct species from those of the secondary period.

The general history of organic formations as re-

¹ See the quotations adduced in p. 65; and Lyell's *Manual*, p. 460.

vealed by Geology is nearly as follows. The Earth's surface, it may be supposed, was prepared, by operations partly gradual and partly abrupt, to be fit for the life and growth of plants and animals, no other purpose having been hitherto ascertained or recognised. During this process, as soon as any portion had been so elaborated as to be proper for maintaining in life a certain kind of plant or animal, specimens of that kind made their appearance. The first individuals were of an inferior order both as to species and size, and were succeeded by others of a higher order of magnitude and dignity, in proportion as the continually changing circumstances of the Earth's surface were adapted to receive them; till at length an epoch of maximum developement as to numbers and size, but not necessarily as to dignity or complexity of organization, was reached, after which the specimens declined as to numbers and size¹. In the mean while, and anterior to the epoch of the maximum of the first kind, inferior individuals of quite another kind began to shew themselves, which were succeeded by species of the same class larger and

¹ "The highest developement of each class is a fact not dependent on time, but upon physical conditions." Sedgwick's *Discourse*, p. lvii. "In the Fauna of any old period (e. g. the Oolitic) species were gradually exterminated by the changes of physical conditions." *Ibid.* p. cxxxix.

more fully developed, till, after another maximum was attained, the specimens declined as to size and abundance, increasing at the same time in some instances as to complexity and perfection of organization. The facts of Geology, as already remarked, indicate *three* such culminating points.

Guided by this outline of the history of plants and animals in the geological periods, and arguing now on the hypothesis that the Scripture gives a proleptical account of the creation as designed, we shall be able to state a reason why the Scriptural epochs of the creations of the several classes of organizations are not in accordance with the historic epochs of their *first* appearances. It has been found that at the first appearances the creative operation is not at its highest and fullest developement. But an antecedently conceived plan must apply in an especial manner to the maximum operation, otherwise it is not sufficiently comprehensive of *all* conditions. Also a scheme which applies to the maximum of the operation must embrace all the ascending steps by which the maximum is reached, and all the subsequent descending steps. Now according to Geology these gradations depended on the varying conditions of the Earth's surface. Hence, although the three principal schemes of organic creation are distinct from each other in respect to the groups of organizations which they

severally embrace, the intervals over which their unfoldings were spread *overlapped* each other, apparently because the physical conditions proper for different stages of different developements were coexistent. This appears to be a sufficient explanation why in a description of the original design, the epochs of the creations of organisms (necessarily indicated by reference to time), do not agree with the historic epochs of the beginnings of the species, but with those of their maximum developements.

On the principle that the Scriptural statements are not narrative but proleptical, we may account for the creation of fruit-bearing trees being described as coincident with that of plants, although the geological records shew that the former did not exist in the carboniferous period. In the Mind of the Divine Architect the scheme of the more complex form embraced the less complex, and for this reason the creation (in design) of the one is not separated from that of the other. In Gen. ii. 9, where the record is certainly narrative, we read, "And God still made to grow out of the ground every tree beautiful to the sight, and good for food¹." Here the design expressed in Gen. i. 11, is asserted to

¹ Καὶ ἐξανέτειλεν ὁ Θεὸς ἐτι ἐκ τῆς γῆς πᾶν ξύλον ὠραῖον εἰς ὄρασιν καὶ καλὸν εἰς βρώσιν. The word ἐτι indicates that the operation was performed in time.

be in course of fulfilment on the day of man's creation, that is, the sixth day; and it is worthy of remark that at this epoch *trees* are especially mentioned.

On precisely the same principle, although the descriptive appellation "flying animal" given to creatures of the fifth day, must embrace every kind of winged animal, whether the apparatus for flying be like that of the bat, or that of the bird, it is not necessary to conclude that birds were created simultaneously with reptiles. It is sufficient if a class of large flying animals existed in the reptilian period: and this, the geologist tells us, was the case¹. But the more beautiful and perfect forms of flying creatures, the feathered tribe, appear to have come into existence at a more recent date². This fact seems to be indicated by a supplementary notice in verse 19 of the second Chapter of Genesis, where it is said that "God formed still out of the ground all the beasts of the field, and all the fowls of the heavens³." Just as was argued with reference to Gen. ii. 9, the design expressed in Gen. i. 20, respecting flying animals, is here represented as being pro-

¹ Hugh Miller, *Testimony of the Rocks*, p. 81.

² See the reference to Lyell's *Manual of Geology* in p. 66.

³ Καὶ ἐπλασεν ὁ Θεὸς ἐν τῇ γῆς πάντα τὰ θηρία τοῦ ἀγροῦ, καὶ πάντα τὰ περὶ τοῦ οὐρανοῦ. Here, as in v. 9, ἐνι shews that this sentence narrates an operation in progress.

gressively carried out on the *sixth* day. But it is remarkable that at this epoch beasts and fowls are put in the same category, *both* being now formed from the earth¹. It is reasonable to conclude from this assertion that the flying animals of the more recent period are distinct in species from those that flourished in the fifth day; in short, that the more recent form of the flying creature is that of the *bird*, agreeably to the teaching of Geology.

It has been already observed that the order of the Scriptural creations, which, according to our argument, is the order of maximum developments, agrees for the most part with the order of first appearances. But marine invertebrate animals and fishes form exceptions to this law, inasmuch as they existed before terrestrial plants. Animals of this class ranged over a longer interval of time than any other productions; which may be accounted for by the circumstance that the seas were ready for their reception when the dry land had only partially emerged from the waters. There seems to be

¹ The "Essayist" (p. 221) notices, without explaining, the difference between this statement and that in Gen. i. 20, where flying creatures are said to be produced from the waters. Also he remarks inaccurately, that in the narrative of Gen. ii. there is "no distinction of days." This narrative, commencing at verse 7, applies only to facts coincident with man's existence.

no geological evidence of ~~an~~ epoch of the maximum production of *fishes*. While the species changed very gradually the individuals were always in nearly the same abundance¹. The slow succession of species might be owing to the limited variations of the conditions of life in seas compared with those which the land or the atmosphere may undergo. The special mention of "the great whales" would seem to indicate that in Scripture the epoch of the cetaceans, which was about the commencement of the Tertiary period, is regarded as that of the maximum developement of the marine tribe of animals.

The foregoing considerations tend to shew, that the order of the creations in Scripture is reconciled with Geology on the supposition that it is not the order of the commencements of the different kinds of organization, but that of their maximum generations as to number or size. But this supposition may appear to be too gratuitous, unless it can be shewn that Scripture itself indicates that the record was written on this principle. And this, I think, may be done. We pre-

¹ "During the times of the Old Red Sandstone, of the Carboniferous, of the Permian, of the Triassic, and of the Oolitic systems, all fishes, though apparently as numerous individually as they are now, were comprised in the ganoidal and placoidal orders.....At length during the ages of the Chalk the Cycloids and Ctenoids were ushered in." (Hugh Miller, *Testimony of the Rocks*, p. 65.)

viously noticed (p. 47) that the *creation* of fishes is not expressly mentioned in the same terms as the creation of reptiles, winged animals, and quadrupeds¹. But it is expressly said that God created "the great whales;" then (in v. 22) fishes as a class appear to be addressed in the words, "fill the waters in the seas;" and further on (v. 28) they receive a common appellation. As we are arguing on the hypothesis that this record proceeded from Divine Intelligence, we are justified in concluding that the omission of a direct statement of the creation of so extensive and important a class of animals is significant. The inference I draw from it is, that the *scheme* of the creation of marine animals as a class is comprehended in that of the largest species, and that the principle, which is exhibited in this instance, of indicating the epoch of the creation by reference to a maximum developement, is intended to apply to the other creations, and to the *order* in which they are mentioned².

¹ In Gen. i. 21, after ἐποίησεν ὁ Θεὸς, the words *ἰχθύας ψυχῆς* occur with reference to reptiles, and *ἰπὺν πτερυγῶν* with reference to winged animals, but no such general terms are applied to fishes.

² This argument will probably have little weight with those who with the "Essayist" imagine that the first chapter of Genesis might have been written by some "early Copernicus or Newton" (p. 247). But the holders of this opinion are bound to explain why the writer

The comparison of the account of the creations of the fourth day is rather to be made with astronomical, than with geological, science. So far as Geology is concerned, there appears to be no reason to question the inference from Scripture that at some time between the carboniferous period and the secondary deposits, the conditions of the earth's atmosphere and of the "waters above the firmament" were changed, so that the earth ceased to be self-luminous, and the temperature at its surface was no longer equable. From this time plants and animals were dependent for light and heat on the Sun; and the Sun, Moon, and Stars became visible through openings in the attenuated and disrupted cloud-stratum, days and months and years were marked out, and the limits of seasons determined. Now these effects, which are subservient to the life of man and animals, must have been in the mind of the Great Architect from the beginning, and that wonderful machinery by which, as we know from astronomical science, the effects are brought about, must have been in plan before it was at work. From Astronomy we learn that the Earth is one of several bodies of the same kind for which the Sun performs the same offices;

did not expressly say that God made fishes. A human author would surely have said this.

that the law of the "lesser light" and the "greater light" obtains with respect to other bodies of the solar system besides this earth; and that in all probability the Sun and his attending Planets constitute one of a countless number of systems in which the same kind of operations are going on, the sun, or central body, dispensing from its proper stores light and heat to the bodies which revolve around it. But however vast the Universe may be, and however numerous the systems of which it is composed, we have no reason to conclude that the conditions of life on the minor bodies are maintained in any modes essentially different from those described in Gen. i. 14—18. It is true that the circumstances are different on the principal bodies, which are independent sources of light and heat; but yet, if the views that have been propounded in this Essay be correct, they are not very different from those under which life was maintained on the surface of the Earth during the earlier stages of its history. We know from personal sensation and experience that on whatever orb in the regions of space we might be placed, that orb would be to us the centre of the Universe, and would, as far as regards the purposes of life, be ministered unto by surrounding orbs. This oneness of scheme, united with variety and multiplicity in the instances, is a principal characteristic of the cosmical arrangements, and

I seem to see in it a reason why the Sun and Moon are not mentioned by *specific* names in the Scripture Cosmogony. It is, at least, certain that the general scheme and the purposes to which it was to be applied were conceived together by the Intelligence of the Creator; and this appears to be a sufficient reason why, in an account of the original plan, the formation of the Sun, Moon, and Stars, and the accomplishment of the purposes for which they were designed, are described as taking place simultaneously, although in the actual unfolding they were separated by course of time.

I have now completed the discussion of the principal difficulties which are encountered on bringing the Scripture Cosmogony into comparison with modern science, and have suggested considerations and principles by which they appear to admit of explanation. Two suggestions have been especially insisted upon. One of them is the physical hypothesis that when light was created the earth became self-luminous. This, it was argued, is an admissible supposition, inasmuch as the conditions of self-luminousness, so far as they are at present known, are not contradictory to what the Scripture states respecting the primæval circumstances of the Earth's surface. The supposition can be confirmed, or set aside, only by a more complete knowledge of the conditions under which bodies are self-luminous. The

other suggestion is, that the Scripture Cosmogony is not a history of facts, but a compendious statement of a scheme extending from the beginning to the end of time. That a scheme of this kind was conceived in the Mind of the Creator will be evident on considering that the creation is a *work*, and it is essential to every rational work, that it be done according to a preconceived plan embracing the whole of it. As human works are such, the Divine Work was antecedently such. Hence it is allowable to found an argument on the hypothesis that the first Chapter of the Bible exhibits the original scheme of the whole creation; and as it has been shewn that by thus arguing difficulties are explained, and Scripture and Geology are reconciled, it is reasonable to conclude that this portion of Scripture is a communication from One to whom the counsels of the Creator were known from the beginning, and that it was rightly assumed at the commencement of this Essay that the Author of it is the Holy Spirit of God.

There yet remain to be considered some questions which were reserved for separate treatment as being of a doctrinal and *esoteric* character. As they are related in an important manner to the general argument for the Divine authority of the Scripture Cosmogony, they could not be omitted in this Essay; but it is mainly as bearing on that argument that they will be here discussed.

I use the word "esoteric" as properly describing (what undoubtedly exists in Scripture) a meaning not immediately conveyed by the objective signification of the words employed, and to be elicited from them only by research and inference. A great part of the science of Scripture consists in making such deductions. When an esoteric meaning is intended, the statement is generally made in terms which, though intelligible by facts of experience, taken in their literal signification, affirm what is contrary to, or distinct from, ordinary experience. The literal signification is thus excluded, and a passage which has an esoteric sense, although expressed through the medium of objective entities, has not a "double sense." All miracles have an esoteric signification¹. These remarks will be exemplified in the following discussions.

¹ The creation of Eve (respecting which the "Essayist" has nothing better to say (p. 222) than that it was "the repairing of an omission") was a miracle performed in exercise of that power which is expressed in the words, "God is able of these stones to raise up children unto Abraham" (Matt. iii. 9). But the miracle was performed in an especial manner, for the purpose of distinctly announcing a necessary and significant law of human society. In this instance the esoteric meaning is stated (Gen. ii. 23, 24). In others, as in the extraordinary vision of Abraham (Gen. xv. 12—17), which plainly has an interior sense, none is given.

THE CREATION OF MAN IN THE IMAGE OF GOD.

“And God said, Let us make man according to our image and similitude.” These words, taken in conformity with the ordinary use of language, certainly express that more than *one person* had part in the creation of man,—that the Creator did not act alone, but took counsel, in this work. Many ages after this sentence was written the Holy Spirit revealed to the Apostle John, that “the Word was with God in the beginning, and was God: all things were made through Him, and without Him was not any thing made that was made” (Joh. i.). The Apostle Paul also, taught by the same Spirit, wrote respecting the Son, that He is “the image of the invisible God,” and that “all things were made through Him and unto Him” (Col. i. 15, 16). These passages explain not only why it is said “let *us* make man,” but also why it is added “in *our* image,” the Son, who took the form of man, being “the image of the invisible God¹.”

It has been already noticed (p. 38), that the account

¹ The occurrence in the earliest pages of the Bible of this and other passages (as that in Gen. iii. 15), which did not receive full explanations till the Apostolic times, shews that the Bible differs from all other books in the respect, that although the various parts were written in ages widely distant, *one Mind* and *one Wisdom* pervade the whole. Being different in this respect, its interpretation must be different from that of all other books.

of *every* creative act is preceded by a statement of what "God said." When it is considered that this occurs in a recital of the original scheme of the creation, it will be seen that what is thus *spoken*, is spoken by the *Eternal Word*. The words "let us make," prove that He was with God the Creator from the beginning. And as He that speaks and He that creates are one, "the Word was God." Also that which is spoken must admit of objective manifestation, because the objects of the external world are the foundation of language and give significance to *speech*. It is by being such that they subserve to the formation of the spirit of man for its eternal destiny. But the external world is subservient to this purpose by the manifestation of the Son of God, the same that spoke from the beginning; through whom, therefore, and unto whom, as the Apostle writes, "are all things;" whose *doctrine*, whether *preached* by Himself or others, saves; whose "*name* is called the *Word of God*" (Rev. xix. 13). It appears, therefore, to be unnecessary to go farther than the first Chapter of Genesis, to account for the doctrine taught by the two Apostles above quoted, which may be regarded as being authoritatively deduced from the Divine record of the creation. It would seem from the ideas that prevailed respecting the Logos, that a doctrine of this kind was inferred in very ancient times.

That the Holy Spirit equally with the Son was taken into counsel, is proved as well by the record which He made of the consultation, as by the marvellous account of the whole scheme of the creation which He has given as the Introduction to the Scriptures. If there be any truth in the explanations of this account and the principles of its interpretation, which have been proposed in this Essay, it could have proceeded from no other source than from the Mind of One who was cognisant of the counsels of the Almighty Creator from the beginning. It is the peculiar and necessary office of the Holy Spirit to *write* of things past and things to come, in order to bring them into relation with the present. Created works and spoken words *inform*, as was before said, the spirit of man; but not alone as seen and heard, but as being *intelligently described and recorded*.

The foregoing considerations will assist in the enquiry I now propose to make into the exact meaning of the assertion that God made man in the Divine image¹. This enquiry it is necessary to enter into, because in

¹ The Authorised Version of Gen. i. 27 is, "So God created man in his *own* image, in the image of God He created him, &c.," the word "own" not being expressed in the original. In the Septuagint, "in his own image," which does not well agree with "in our image" in v. 26, is omitted.

the general argument it was assumed that "man" in Gen. i. 26 designates the whole race, and by consequence that *all* are created in the image of God: whereas the theology which prevails at the present time, teaches that Adam and Eve only were created in the image of God, and that that image was *lost* by sin. If the "loss of the divine image" be intended to signify the utter sinfulness of the natural man and his entire opposition to the will of God, the doctrine may be assented to by those who would maintain that this expression of it is *unscientific*, neither occurring in the Scriptures, nor justified, but rather contradicted, by Scriptural language. This will appear by references to various passages bearing on the point.

It has been already stated that the "book" of the cosmogony is concluded by the summary contained in verses 4 and 5 of Gen. ii., and that a second "book" commences at verse 6. This narrative is concluded in a similar manner in verses 1 and 2 of Chap. v. with these words: "This is the book of the generation of men, on the day that God made Adam. In the image of God He made him; male and female He made them; and blessed them, and named their name Adam on the day when He made them¹." It is here to be remarked

¹ Ἀὕτη ἡ βίβλος γενέσεως ἀνθρώπων, ἣ ἡμέρα ἐποίησεν ὁ Θεὸς τὸν Ἀδὰμ· κατ' εἰκόνα Θεοῦ ἐποίησεν αὐτὸν, ἄρσεν καὶ θῆλυ ἐποίησεν αὐτούς·

that at the end of a brief history of actual occurrences in the infancy of the world, the genesis of *men* is spoken of as included in the creation of the individual Adam, and that the name Adam is comprehensive of both race and sex. One appears to comprehend all, as being a type of all. The language of St Paul in Rom. v., and in 1 Cor. xv. 22 and 48, is in accordance with this relation of the one to the many. Hence it may be concluded *à fortiori* that "man," in the proleptical statements of Gen. i. 26 and 27, designates the race, and that consequently all are created in the image of God. In Gen. v. 3, where a third narrative commences, we are told that Adam begat a son "according to his form and according to his image¹." Does not this imply that the image in which Adam was created descended to his posterity? In Gen. ix. 6, where the law is given that the blood of him shall be shed who sheds man's blood, God adds as a reason, "because I made man in the image of God." This reason is not valid unless each one whose blood may be shed, was made in the image of God. When St Paul (1 Cor. xi. 7) says that a man

καὶ εὐλόγησεν αὐτοὺς, καὶ ἐπωνόμασε τὸ ὄνομα αὐτῶν Ἀδὰμ, ἥ ἡμέρα ἐποίησεν αὐτούς. From Field's edition, in which τὸ ὄνομα αὐτῶν, which agrees with the Authorised Version, is read in place of τὸ ὄνομα αὐτοῦ, given in other editions.

¹ Κατὰ τὴν ἰδέαν αὐτοῦ καὶ κατὰ τὴν εἰκόνα αὐτοῦ.

should not cover his head because "he is the image and glory of God," he must surely have meant that this reason applied to those whom he was addressing. Also St James (iii. 9) speaks in general terms of "*men* who are made after the similitude of God." It is evident from these passages that in certain respects all men are created in the image of God. Let us next enquire in what respects this is so.

In the first place, it may be remarked that in Gen. i. 27, immediately after the assertion, "in the image of God He made him," there is added this other, "male and female He made them," as if in connection with the former and explanatory of it. (The same is the case in another passage (Gen. v. 1, 2), which is quoted above.) Now since the literal and objective sense of the latter assertion can have no such connection or application here, it must be concluded, according to a principle before enunciated (p. 80), that an esoteric meaning is intended. It is reasonable, therefore, to suppose that reference is made to man's partaking of a moral, as distinct from an intellectual, nature, so that, like his Maker, he not only knows but loves. This sense involves as an antecedent the objective fact that man was made "male and female," because the exercise of the moral sense is called forth in an especial manner by the conjugal relation, the violation of which is con-

stantly in the Scriptures a general name for sin against God.

Again, it was noticed in the remarks on Gen. i. 29 (p. 53), that while the terms of the statements there made are intelligible from the fact that herbs and fruit-bearing trees furnish food, something more than this fact is intended to be conveyed, because it is asserted that *every* herb and *every* tree is proper for this purpose; which is contrary to experience. Hence, according to the principle referred to above, an esoteric sense is to be sought for. Such a sense is suggested by the following passage in Deuteronomy (viii. 3): "Man shall not live by bread alone, but by every word which proceeds out of the mouth of God shall man live." Here it is declared that with respect to life, *food* and *knowledge* have corresponding effects. This is one of many analogies in the Scriptures, the principle of which is, that all mental and invisible entities have their outward analogues or representations. In the Old Testament, as well as the New, "meats" signify knowledge. In the very next Chapter of Genesis, we read of "eating of the tree of knowledge of good and evil" (ii. 17). This being understood, it may be seen that *every* herb and *every* tree are said to be given for food, because knowledge consists in discerning wrong as well as right, evil as well as good, and separating the one from the other,

just as one kind of food is distinguished from another. According to this principle of interpretation the passage before us has not a "double sense," although its appropriate sense involves the exoteric fact that God created herbs and trees to furnish food.

To the other living creatures "every green herb" is given for food, without mentioning trees, or specifying the reproductive property. This, according to the foregoing explanation, implies that they also have a degree of intelligence, but far inferior to that of man.

These views receive confirmation from what is stated in Genesis ix. 3: "Every moving thing which lives shall be meat for you: as the green herbs, I have given you all¹." Here, as before with respect to plants, it is expressly said that *every* living thing without exception is given for food. But as we know from experience that some animals are proper for food and some not, on

¹ Καὶ πᾶν ἔρπετόν, ὃ ἐστὶ ζῶν, ὑμῶν ἐστὶ εἰς βρώσιν ὡς λάχανα χοίρου δέδωκα ὑμῶν τὰ πάντα. The "Essayist" (p. 222) infers from these words that "in the earliest view taken of creation, men and animals were supposed to have been, in their original condition, not carnivorous." Nothing, however, of this sort can be deduced from the passage, which affirms that in process of time God gave *all* living things to be food for man. Taken literally this would mean that men might feed on lions and crocodiles. But I think the Essayist must admit that not even "a Hebrew" could assert what is so palpably contradicted by fact. As argued above, the sense of the passage is not exoteric.

the same principle as before, the literal meaning is excluded, and the sentence requires an esoteric explanation. The following readily presents itself. We have seen that the partaking of all kinds of herbs and trees for food signified the acquisition of knowledge. The same explanation applies to the partaking of all kinds of animals, and to the distinguishing between one kind and another. But here the difference in the quality of the food is also significant. As herbs are proper for the weak, and meat for the strong, so knowledge is of different degrees, varying by course of time in the same individual, and varying also in the world generally. As each individual is educated, so the world collectively is educated. It seems that God took occasion to give this further ordinance respecting meats, soon after the world had undergone "baptism" by the deluge, and as respects its education a new era had commenced.

At a later period God gave a special ordinance to his chosen people respecting meats, commanding them, for instance, to eat the sheep, and forbidding them to eat swine. This signifies that beyond the knowledge and discernment required for the ordinary transactions of life, there is a higher kind of knowledge, a *spiritual* discernment, which those attain to who have *faith*¹.

¹ These views may possibly be regarded by the "Essayist" as coming from "a professed mystifier of the school of Philo." I am

Upon the whole the foregoing argument tends to the conclusion that to be made in the image of God is to be endowed with capacity for the love and the knowledge which are the characteristics of the Creator Himself, and to receive this endowment in a bodily form which the Son of God consecrated for this purpose. Clearly it is this antecedent condition that made Adam a sinner when he disobeyed the command of God, and that makes sinful every son of Adam who opposes the will of his heavenly Father; as it is the absence of it that exempts from sin the lower animals. But to be created in the image of God in its fullest sense, is to be made conformable in *spirit* to the Holy Spirit of God. This farther and new creation, as was before intimated, is signified in Gen. i. 26—28 by the subjection to man of the whole external creation, animate and inanimate. But here, according to the principle of interpretation which was applied to the accompanying passages, the literal subjugation of the objects named is not meant, but rather the subjugation of the qualities

unacquainted with the writings of Philo, and can assert that the explanations I have proposed are the result of independent research, carried on, with whatever success, under the full persuasion that there is a science, fixed and determinate in its principles, to which the words of Scripture stand in the same relation, as facts of observation to the science of nature. Mysticism is an abuse of this science.

and affections of man's corporeal nature which they represent. These, for the time present, are antagonistic to his spiritual perfection, and will continue to be so, till in the end they are all brought into subjection to the Son of Man, and *time itself is overcome*¹. This will be the completion of the work of the sixth day.

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"And God saw all things, as many as he made, and behold they were very good. And evening was, and morning was, the sixth day. And the heaven and the earth were finished, and all their arrangement²." (i. 31 and ii. 1.)

The following remarks have reference chiefly to the

¹ This idea occurs in the last of the following lines, which are here quoted as presenting one instance among many that might be adduced, of the expression of profound and weighty truths in poetry, which are not often met with in prose.

"Then round about the starry throne
Of Him who ever rules alone,
Your heavenly-guided souls shall climb,
Of all this earthly grossness quit,
With glory crown'd for ever sit,
And triumph over death, and thee, O Time."

² Καὶ εἶδεν ὁ Θεὸς τὰ πάντα, ὅσα ἐποίησε, καὶ ἰδοὺ καλὰ λίαν. Καὶ ἐγένετο ἑσπέρα, καὶ ἐγένετο πρωΐ, ἡμέρα ἕκτη. Καὶ συνετελέσθησαν ὁ οὐρανὸς καὶ ἡ γῆ, καὶ πᾶς ὁ κόσμος αὐτῶν.

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statement in v. 31, that all the things that God made in the six days of creation were "very good." The argument for the Divine Authorship of this account of the Cosmogony renders necessary an enquiry into the meaning of this assertion, because the inference has been drawn from it that evil was not actually in the world till Adam sinned; whereas Geology shews that there were creatures of God that destroyed and devoured one another long before that time, and were furnished with natural means of doing so. This apparent discrepancy between Scripture and Geology admits of being explained, on the principle of interpretation we have hitherto adopted, by the following considerations.

Admitting, for the various reasons that have been adduced in this Essay, that the Scripture gives the *antecedent scheme* of the whole creation, and not successive steps of the creative operation, it will follow that the assertion that all was "very good," must refer to the *purpose* and the *end* of the creation, and not to the *means* by which its accomplishment is effected. As proceeding from a good and beneficent Creator, the purpose and the end must needs be *good*. The Holy Spirit has not left us without express information on this point. The following passage from the prophet Isaiah (xi. 6—9) has a direct bearing on the present

argument. "The wolf shall dwell with the lamb, and the leopard shall lie down with the kid; and the calf, and the young lion, and the fatling together; and a little child shall lead them. And the cow and the bear shall feed; their young ones shall lie down together; and the lion shall eat straw like the ox. And the sucking child shall play on the hole of the asp, and the weaned child shall put his hand on the cockatrice's den. They shall not hurt nor destroy in all my holy mountain; for the earth shall be full of the knowledge of the Lord, as the waters cover the sea." This is a description of what shall be "*in the end.*" As it was argued that in Gen. i. 26 the qualities of animals have an esoteric signification, this may be assumed *à fortiori* to be the case in the present passage, which may be regarded as generally asserting that eventually all forms of evil will be subdued, when the knowledge of the Lord is perfect, and when *discipline* and *instruction* are no longer required for attaining to knowledge.

Apart from any deductions from Geology, it is evident from Scripture itself that the Spirit of Evil was in the world before Adam sinned; for how otherwise could he have been tempted by the *serpent*?

But it is only in the process of unfolding the scheme, and during the creative operation, that evil

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has any existence; evil *preceding* good in the order of developement, and finally yielding to good.

There are many analogies in nature which will help us in giving distinctness to this conception. Natural science teaches that *effects* are brought about by the operation of active forces and vital energies on matter, which though inoperative itself, *resists* when acted upon. There is antagonism between active force and *vis inertie*, the former always prevailing, and producing positive effects by operating against the latter. A stone thrown upwards rises only to a certain height, and is eventually compelled to take the course impressed upon it by the force of gravity¹. The order and stability of the courses of the Planets in their orbits, which are so justly the subject of our admiration, are, as is known, results both of the *vis inertie* of the bodies and the active power of gravitation; and more than this, these bodies must have received an *initial impulse*, because if they had been originally at rest, the forces now acting upon them could not have induced the observed motions. The vital energy of a tree, acting on dead

¹ This illustration is virtually the same as one that occurs in the *Shepherd of Hermas* (Command XI. 3), which is employed to indicate the superiority of the power of the spirit that comes from God above that of the earthly spirit. This instance may serve to shew that the ideas I am labouring to exemplify are not new.

matter, produces a form "beautiful to behold," and fruit "good for food;" but antecedently the dead matter is in existence, and its inertia must be overcome.

Other analogies may be gathered from the Scripture account of the creation. Darkness, the opposite of light, was also antecedent to it. Water, an unstable element, covered the earth before the *rocks* appeared: and animals that had their genesis from water, preceded those which the land produced. But the progression which is most remarkable in this respect is that of the genera and species of the animal creation, respecting which a few more words may be appropriately added here. The shark and the crocodile were early inhabitants of the earth, and it seems that the first specimens differed but little from those now existing. The animals that flourished in the Secondary period were many of them monsters in form and size, and had peculiar organizations for enabling them to destroy and devour. And as they were destructive, so also they were doomed to destruction; for naturalists tell us that nearly all those singular and gigantic forms, with which the researches of Geology have made us familiar, have been swept away, or have dwindled down to insignificant representatives. *Beauty* of form was certainly not one of their characteristics. When the reign of these monsters

had come to an end, the earth was peopled by creatures distinguished by a different and a higher organization; some of gigantic size, as the mammoth and the mastodon, which have passed away; others formidable by their destructive powers, as the rhinoceros, the tiger, and the hyæna, which still remain; while noble forms of wild and tame animals, as the lion, the eagle, the horse, and the ox, and innocuous and beautiful kinds, as the deer, the lamb, and the dove, were destined to be more especially the contemporaries of the human race. It is an interesting and an instructive lesson which has been taught us by Geology, that in the midst of forms that are emblems of evil there gradually arose others that are emblems of good; and it is not a little remarkable that the discovery of this secret of nature was reserved for these times.

The description of Behemoth in the Book of Job (chap. xl.) does not appear to apply to a particular animal, but rather to be drawn from the characteristics of the fiercest and most powerful of the wild beasts¹. So that of Leviathan (Job xli.) embraces the chief characteristics of the great monsters of the deep. The mention made in the account of the fifth day's creations of great whales (which need not be restricted

¹ The word in the Septuagint corresponding to Behemoth is *θηρία*, wild beasts. That corresponding to Leviathan is *δράκων*, a dragon.

to the cetacean class of animals), is the origin of the subsequently developed conception of Leviathan. It is evident that each of the two descriptions represents exoterically the Spirit of evil,—“the king over all the children of pride.” Hence the view taken above of the representation, by animals of monstrous size and savage disposition, of the power of evil, is borne out by Scripture. It may also be observed that Scripture speaks of the destruction of both these living creatures. That of Behemoth is signified in Job xl. 19, where it is written, “He that made him can make His sword approach him¹.” The destruction of Leviathan is predicted in Isaiah xxvii. 1².

Very similar doctrine is taught in a book to which our forefathers gave an honourable place, but which

¹ In the Septuagint we have in the latter clause of Job iii. 8, ὁ μέλλων τὸ μέγα κῆτος χειρώσασθαι, “he who is destined to subdue the great whale,” where τὸ μέγα κῆτος is plainly the same as the dragon, or Leviathan. Again, in Job xxvi. 12, ἐπιστήμη ἐτρωσε τὸ κῆτος may be translated, “by wisdom he wounded the dragon,” τὸ κῆτος being equivalent to τὸν δράκοντα τὸν ἐν τῇ θαλάσῃ in Isaiah xxvii. 1. It is remarkable that in the Authorised Version of this passage, “the proud” is the equivalent of “the dragon.” It may be seen that one abstract idea runs consistently through all this variety of expression.

² The translation of this verse from the Septuagint is as follows: “In that day God will strike with his holy and great and strong sword the dragon the fleeing serpent, the dragon the crooked serpent; and will destroy the dragon in the sea.”

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is little esteemed and understood in these days: I mean the Fourth Book of Esdras. In the sixth chapter, which contains an epitome of the works of the six days of the creation, the writer says respecting what was done on the fifth day (vv. 49—52), "Then didst thou ordain two living creatures, the one thou calledst Enoch, and the other Leviathan; and didst separate the one from the other: for the seventh part, namely, where the water was gathered together might not hold them both. Unto Enoch thou gavest one part, that which was dried up the third day, that he should dwell in the same part, wherein are a thousand hills; but unto Leviathan thou gavest the seventh part, namely, the watery; and hast kept him to be devoured of whom thou wilt, and when." In verse 42 the dry land was said to consist of six parts, and the water of a seventh part, in order to signify the superiority of the stable above the unstable element. Here intensity is given to the idea of stability and perpetuity by the "thousand hills." Enoch is evidently put for a righteous spirit, which abides for ever; and Leviathan, which is to be devoured, for the Spirit of Evil. All destruction is not on the side of evil, for evil itself is to be destroyed. He who is destined to do this at the time that God has appointed, is called in Scripture, "The *Lion* of the tribe of Judah."

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The same *order* in the spiritual creation is indicated in Gen. iii. 15, by the sentence, "he shall wound thy head and thou shalt wound his heel¹," the interpretation of which appears to be, that the seed of the woman, whom the serpent had power to *hurt* by wounding on the *heel*, has power eventually to *destroy* the serpent by wounding him on the *head*.

To pursue this subject farther, on which more might be said, would be beyond the purpose of this Essay. The foregoing considerations may suffice to establish the position, that Geology and Scripture concur in indicating the existence, prior to the creation of man, of the Spirit of Evil, to whom belongs the "power of death," whose reign, therefore, was even then a reign of death. But *sin* was not in the world till a being endowed with moral and intellectual capacity, (and such, as we have seen, Adam was), disobeyed the command of his Maker, and thus violated the law of a spiritual life and the condition of immortality². Then began, under the rule of the Adversary, the law,

¹ Αὐτὸς σοῦ τρήσει κεφαλὴν, καὶ σὺ τρήσεις αὐτοῦ πτέραν. I have ventured to put *τρήσει* and *τρήσεις* in place of *τηρήσει* and *τηρήσεις*, the latter giving no appropriate sense.

² This appears to be the meaning of, "in the day that thou eatest thereof thou shalt surely die;" for Adam did not actually die in the day that he sinned.

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in *intelligent* beings, of sin and death, the consequences of which are seen in the sorrow, pain, and death, which have so plentifully abounded ever since. But these very consequences are, in the wisdom of God, the means by which (in accordance with the before mentioned analogies) the antagonistic power is eventually overcome, and the whole creation, externally and spiritually, is made "very good." This oeconomy is intimated in the following very remarkable passage (Gen. iii. 22), "And the Lord God said, Behold Adam is become as one of us, in knowing good and evil¹." It cannot, I think, be questioned that the *Persons* here meant by "us" are the same that were in council when God said, "Let us make man," and that "one of us" designates the Son of God,—the *Lamb* slain from the foundation of the world,—who at the appointed time actually experienced evil for man's sake. This "fellowship" between the Lord of the whole creation and ourselves in suffering the consequences of our sins, is, when apprehended by faith, the pledge and the means of our salvation. The Son of Man, who began the warfare for us by sorrow and suffering in this world, laid the foundation of a victory, which He will achieve, by overcoming death and him that

¹ Καὶ εἶπε Κύριος ὁ Θεός· Ἴδού Ἀδάμ γέγονεν ὡς εἰς ἐξ ἡμῶν, τοῦ γινώσκειν καλὸν καὶ πονηρὸν.

has the power of death, *in the world to come*. But as in the natural creation, darkness preceded light, so in the spiritual creation the kingdom of the prince of this world is darkness compared to the brightness of the day that is hereafter to be revealed. Hence the apostle says, "The *night* is far spent, the *day* is at hand."

Thus Scripture, equally with Geology, leads to the inference, that the creation has gone on in a regular progression, and that there was no *reversal* of its order when Adam sinned, such as there would have been, if, as some say, evil then supervened after all things had been made very good.

THE SEVENTH DAY.

"And God finished in the sixth day His works which He made, and He ceased on the seventh day from all His works which He made. And God blessed the seventh day and sanctified it, because in it He ceased from all His works which God began to make¹" (ii. 2 and 3).

¹ Καὶ συνετέλεσεν ὁ Θεὸς ἐν τῇ ἡμέρᾳ τῇ ἑκτῇ τὰ ἔργα αὐτοῦ, καὶ ἐποίησε· καὶ κατέπαυσε τῇ ἡμέρᾳ τῇ ἑβδόμῃ ἀπὸ πάντων τῶν ἔργων αὐτοῦ, ὧν ἐποίησε. Καὶ ἡλόδογησεν ὁ Θεὸς τὴν ἡμέραν τὴν ἑβδόμην, καὶ ἡγάσεν αὐτήν· ὅτι ἐν αὐτῇ κατέπαυσεν ἀπὸ πάντων τῶν ἔργων αὐτοῦ, ὧν ἤρξατο ὁ Θεὸς ποιῆσαι.

Respecting the seventh day it may, first, be remarked, that no mention is made of any limitation of its duration; nothing is said about its consisting of a period commencing with evening and a period commencing with morning. Those who say that each of the other days was a solar day must, to be consistent, maintain that the seventh day was of the same duration, and may, accordingly, be asked to explain why it is not spoken of as being limited in the same manner as the other days. According to the view taken in this Essay it is not difficult to account for this peculiarity. It has been argued that the Scripture Cosmogony is a statement of the original scheme of the creation, regarded as included within six intervals of time, called days, but not of actual duration. Consequently the mention of the seventh day, and of the rest on the seventh day, is, as well as the scheme, proleptical; as in fact it is expressly said to be in Heb. iv. 3—10, where St Paul argues that although, according to one portion of Scripture, God ceased from all his works in the seventh day, according to another, a rest still remains for the people of God, who when they enter into rest cease from their works, as God from his. Now when at the end of the sixth day the works of God and man are all finished, *time*, as measured by a succession of events, exists no longer, because all succession ceases. It

appears to be on this account that the seventh day is spoken of without limitation as to its duration.

Again, if each of the six days be a natural solar day, and by consequence the seventh day be the same, it will follow that God ceased from work only during that brief interval. But it cannot be admitted that the Creator of the Universe ceases at any time from work, before he ceases from work altogether. Our Lord said, referring to the Sabbath, "My Father worketh hitherto, and I work" (John v. 17). This saying accords very well with the view taken in this Essay, according to which the work of God extends from the beginning of the creation through the present age to the commencement of the Sabbath of eternal rest in the age to come.

The terms in which the fourth commandment is expressed have been appealed to in support of the idea that each of the seven days spoken of in Genesis is a natural day. It is maintained that as the six days in which work may be done, and the seventh day to be devoted to rest, are natural days, the days mentioned in the reason given for the commandment must be of the same kind, because the same word "day" could not occur in the same passage in different senses¹.

¹ This argument is advocated by Archdeacon Pratt, and is quoted by the "Essayist" (p. 241), who is himself of the opinion that a "day

To this I reply, that so far as the words of the commandment refer to the original scheme of the creation,—to the works as done from the foundation of the world,—the question as to the length of the days has no application. But if it be contended that in the observance of the command the six days of work and the seventh of rest are *commemorative* of six *literal days* of creative action, and one of cessation from work, it may be answered that in the law of Moses no ordinances are simply commemorative, but that *all* are typical and prospective. The passage in the Epistle to the Hebrews referred to above, proves that there is a future rest remaining for the people of God. It may be presumed, therefore, that the observance of the sabbath, enjoined in a law which "*is spiritual*," was intended to typify that rest, and to be an expression of belief and expectation of it. For this reason the observance of a seventh day was not discontinued in the Christian dispensation, that which it typified being still future. Consequently it may be concluded that the seventh day in the commandment refers to no other actual event than the sabbath of the world to come. The typical

spoken of in terms like those in the first chapter of Genesis, and described as consisting of an evening and a morning, cannot be understood to mean an age," the author of the description being assumed to be "a Mosaic writer."

day and the day typified are spoken of by the same appellation in accordance with a constant rule in Scripture, according to which the symbol and that which it symbolizes are expressed in the very same terms. It would indicate very little acquaintance with Scriptural science to be ignorant of this principle, which is the same as that by which we call combinations of lines of certain forms, written or printed on paper, *words*, although they are such only as being symbols of spoken words.

Moreover, those who take the above-mentioned view are met by what seems to be an insuperable difficulty in the circumstance, that where the Decalogue occurs again in Deuteronomy (Chap. v.), the reason assigned for the observance of the sabbath has apparently no reference to the creation, or to a seventh day, being expressed in these terms: "Remember that thou wast a servant in the land of Egypt, and that the Lord thy God brought thee out thence through a mighty hand and by a stretched out arm: therefore the Lord thy God commanded thee to keep the sabbath-day." This reason, given in the second Law, is as valid as that given in the first, and, if rightly understood, would, doubtless, be seen to be in accordance with the other, or to be comprehended in it. Since in the reason given in Deuteronomy a *miraculous* event is appealed to, it

may be inferred, according to a principle already stated, that we must here seek for an esoteric meaning, which possibly may be elicited by comparing the two reasons together. This I shall now endeavour to do.

In the first place I remark, that in the Septuagint and other versions of Gen. ii. 2, it is said that God ended his work "in the sixth day," whilst the Hebrew text has, "on the seventh day." This difference is not necessarily a discordance, but may admit of being accounted for by a difference of point of view. If all works whatever are regarded as included within six days, the completion of the works may properly be said to take place on the sixth day. But the Scriptures inform us that after the present age terminates, and the generations of men cease, there follow in a subsequent age a resurrection, a judgment, and the work of finally subjugating all adverse powers. If the sixth day be regarded as terminating with the present age, the completion of all works will be effected on the seventh day, in accordance with the Hebrew reading of Gen. ii. 2. Now of these two views, the first is evidently taken in Exodus xx.; and that the other is taken in the Decalogue as given in Deuteronomy, will appear from these considerations. The deliverance of Israel from Egypt was effected by a miracle of an especial character, the

sea, which divided to let Israel pass, overwhelming their enemies. There is not only an esoteric meaning in this wonderful event, the exemption of "the people of God" from *death* being signified, but it has also a typical and prospective meaning. From the manner in which it is frequently referred to in the Psalms, it would appear that the faithful and religious of those days understood it to be an evidence of the eventual destruction of all enemies to righteousness and peace. This is the work to be accomplished in the age to come by Him who on this account is called "Lord of the Sabbath" (Luke vi. 5). Thus the seventh day of rest, though not expressly named in Deuteronomy, is referred to by the mention of an event, which was typical of the ultimate attainment of eternal rest.

These views may serve to explain the very peculiar mention made of the sabbath in Matt. xxiv. 20: "But pray ye that your flight be not in the winter [rather, the tempest], neither on the sabbath-day; for then shall be great tribulation." It is plain that the greatness of the tribulation is in no way dependent upon the flight being on a certain day of the week, and that our Lord's words have a weightier meaning than this. May we not say that He here tells those whom He is addressing to prepare in this life by prayer and watchfulness for that revelation of His power and tempest of His

wrath in the age to come,—the seventh day,—which all will witness, and which will strike with terror and amazement those that are unprepared?

As it is of some consequence to shew that the views I am explaining, which have an important bearing on the interpretation given in this Essay to the Scripture Cosmogony, are not new, I will now quote a passage from the Epistle which has been ascribed to the Apostle Barnabas, which, whatever authority it may be thought to possess, may certainly be fairly adduced in evidence of the belief entertained on this subject in the first ages of Christianity, the Epistle being undoubtedly one of the earliest of Christian writings. The following is the passage as translated by Archbishop Wake, whose Preliminary Discourse on this Epistle is well worthy of attention¹.

“And even in the beginning of the Creation He makes mention of the sabbath. ‘And God made in six days the works of His hands; and He finished them on the seventh day, and He rested the seventh day, and sanctified it.’ Consider, my children, what that signifies,—He finished them in six days. The meaning of it is this, that in six thousand years the Lord God will

¹ An extract from this Discourse is added as an Appendix to the Essay.

bring all things to an end. For with Him one day is a thousand years; as Himself testifieth, saying, 'Behold this day shall be as a thousand years.' Therefore, children, in six days, that is, in six thousand years shall all things be accomplished. And what is that He saith, 'And he rested the seventh day'? He meaneth this; that when His Son shall come, and abolish the season of the wicked one, and judge the ungodly; and shall change the sun, and the moon, and the stars; then He shall gloriously rest on that seventh day. He adds, lastly, 'Thou shalt sanctify it with clean hands and a pure heart.' Wherefore we are greatly deceived if we imagine that any one can now sanctify that day which God has made holy, without having a heart pure in all things. Behold, therefore, He will then truly sanctify it with blessed rest, when we (having received the righteous promise, when iniquity shall be no more, all things being renewed by the Lord) shall be able to sanctify it, being ourselves first made holy. Lastly, he saith unto them, 'Your new moons and your sabbaths, I cannot bear them.' Consider what he means by it. The sabbaths, He says, which ye now keep, are not acceptable unto me, but those which I have made; when resting from all things, I shall begin the eighth day, that is, the beginning of the other world. For which cause we observe the eighth day with gladness, in

which Jesus rose from the dead, and having manifested Himself to His disciples, ascended into heaven."

The assertion in the first sentence that the Sabbath is mentioned "even" in the beginning of the creation, and the doctrine that follows, that the rest of the seventh day spoken of in Genesis is yet to come, are in perfect accordance with the teaching of St Paul in Heb. iv. 3—10. Also the principle, so much insisted on in this Essay, of regarding the six days of the Cosmogony, although spoken of as past, as actually embracing a long course of years extending through the present time, is plainly asserted in this passage. It is not necessary to regard the "thousand years" as an exact interval of that duration, but rather it may be taken to be a large interval of unassigned but limited duration. The mention of an *eighth* day for the purpose of distinguishing between the completion of the works in the seventh day, and the beginning of the rest, is also in agreement with explanations that have been offered in this discussion. Evidence of the change of the day on which a Sabbath was observed has descended to the present time, and I am not aware that in any writing of antiquity more valid or probable reasons for the change have been alleged than those given in this Epistle.

It will be seen that the foregoing considerations

relative to the Seventh Day, form a very important part of the general argument respecting the interpretation of the account of the Creation in the first chapter of Genesis.

CONCLUSION.

It will not be pretended that the arguments contained in the foregoing discussions have established conclusively the accordance of the Scripture Cosmogony with modern science, because, as neither the science of Scripture, nor that of Geology, is perfectly understood, this result is not at present attainable. But let it be admitted that reasonable grounds have been adduced for presuming that there is this accordance. Then to the same degree of certainty the following important inferences may be drawn.

There exists a science, having fixed rules and principles, to which the words and statements of Scripture stand in the same relation as observed facts to the science of nature. Inferences in this science are drawn by Biblical research and comparison of different statements, in a manner analogous to the processes of physical investigation. One Mind has governed the composition of the Scriptures, as one Creator created the Universe. Consequently the words of Scripture are to be all.

accepted as the basis of Biblical research, as all observed facts are the basis of physical research. These are the principles that were adopted in the enquiry that we made into the meaning of the Scripture Cosmogony, and as far as the results to which it led bore the test of comparison with geological facts, the truth of the principles is confirmed. The arguments may, I think, be said to have shewn, that with respect to the primæval history of the earth, Scripture and modern science, so far from being irreconcilable, appear to throw light upon each other.

It may be that difficulties will occur in the application of the above-mentioned principles in Biblical research; but confidence in the truth of the Scriptural data ought not for that reason to be given up. Difficulties are met with in physical researches, but the natural philosopher does not the less on that account believe that the laws of nature are certain and ascertainable. Also since Scripture has been in human custody, and has been written and transcribed by human hands, it may contain some anomalies and discrepancies. But we should feel certain that the composition of the Bible and arrangements of its parts are such, that no errors from this source can materially affect its data, or the truths it was intended to convey. In short, *confidence* in Scripture notwithstanding difficulties and dis-

crepancies, must stand at the threshold of Scriptural science¹.

A general argument of this kind may be adduced as a reason for such confidence. The Divine government is a spiritual kingdom, or polity, comprehending many individuals separated by time and space. As every civilized human kingdom has its records and chronicles, without which it could not fulfil the purposes of government, the same is the case in the spiritual kingdom. In fact, this is a necessary condition in human polities, because it was antecedently necessary in the Divine, of which the human are adumbrations. But the Scriptures differ from all human writing in the respect that they not only *record*, they also *predict*; and this difference has reference to a distinctive character of the subjects of the Divine government, who are required to

¹ Probably because the language of the ancient Hebrew text became obscure by the lapse of time, it was provided in the wisdom of God that a new form of the Scriptures should be published in the Greek language, which appears to be peculiarly adapted for such a purpose. The Septuagint, the use of which was sanctioned by apostolic authority, cannot be regarded as a mere translation of the Hebrew, as is evident from the number and character of its deviations from the original. As far as I am able to judge, these deviations are made *scientifically*, and much Scriptural science might be gathered from comparisons of the Hebrew with the Septuagint. For these reasons I have not hesitated to adopt the text of the latter in the foregoing explanations of the Scripture Cosmogony, considering that for this purpose it is perfectly trustworthy.

have *faith*. Without such writing, connecting what to each individual is *in transitu* with the past, and also with the future, the ultimate purpose of the creation, which is to form immortal spirits, is not fulfilled. For this reason constantly in the Scriptures, "it is written" is equivalent to an appeal to facts, and the creation, regarded as in progress, consists virtually of what is written and what is made. Thus Holy Scripture performs a *necessary* part in the Divine œconomy, and on this account demands our entire confidence.

But there are many in these days who feel very little confidence in the Scriptures¹. It may therefore be doing some good to enquire into the cause of the mistrust, and to endeavour to trace it to its origin. There are two reasons that may be especially mentioned, one of which is *want of faith*. But here I must explain what I mean by faith. This is the more necessary, because faith is now frequently spoken of in terms neither taken from, nor consistent with, the *definition* of it expressly given in Heb. xi. 1, namely, "Faith is the substance [or assurance] of things hoped for, the evidence of things not seen²." Here it seems to be

¹ In proof of this assertion it is only necessary to refer to the "Essays and Reviews," and to the fact that the publication of such a work has become possible.

² Ἔστι δὲ πίστις ἐλπιδόμενων ὑπόστασις, πραγμάτων ἔλεγχος οὐ

asserted that faith is the foundation of an *intelligent* comprehension and expectation of things future and unseen. Again, in v. 3 of the same chapter it is said, "By faith we *understand* that the worlds were framed by the word of God¹." It appears, therefore, that faith has relation to the intellectual faculty, and is either antecedent to, or accompanies, understanding. As far as I have been able to gather from the study of that part of Scriptural science, which for distinction might be called Pneumatology, the following is the answer to the enquiry, What is faith? Generally, faith is *trust*,—trust in God,—and is the basis of every good quality, intellectual and moral. Its intellectual consequences are exhibited in what are usually called *talents* or *gifts*; its moral consequences are righteousness and virtue. These effects are seen in very different degrees in different individuals, and in some the former are predomi-

βλεπομένων. It might perhaps be argued from the general laws of language that *ὑπόστασις* (compounded of *ὑπὸ*, under, and *σῶσις*, standing) might mean the same as "understanding" in English, although this meaning is not given in dictionaries. But it is needless to insist on this, because it is admitted that the meaning in this passage is "full assurance," which involves understanding, as being the ground of assurance.

¹ Πιστεὶ νοοῦμεν κατηρτίσθαι τοὺς αἰῶνας ῥήματι Θεοῦ. It may be observed that the "creation of the worlds" is especially mentioned as a subject for the exercise of the understanding.

nant, in others the latter. A character like that of the Apostle Paul exhibits both kinds in the highest degree. The especial effect of *Christian* faith is an intelligent anticipation of the events of the future age, founded on a perception of their relation to the manifestation of the Son of God in this age. It is the want of this faith, which is one principal cause of want of confidence in the Scriptures. Faith is the gift of God. If in these times God should grant more faith, the result would be greater knowledge of the Scriptures, and greater confidence in them.

The other cause is a disbelief of miracle, the origin of which, strange to say, may be traced to the discoveries of physical science. The following is a brief account of this singular circumstance. When Newton had proved that two bodies acted dynamically on each other through intervening space, and called this action gravity, it was objected, and not without reason, that this was ascribing an *occult* quality to the bodies. The answer to this objection was, that "gravity" is the expression of a fact, and nothing more. Newton says in the *Principia* (Lib. III. Regula III.), "I by no means affirm that gravity is essential to bodies," adding as a reason for not affirming it to be such, that gravitation towards a given body varies from point to point of space. The question as to the *modus operandi* of gra-

vity still remained for decision by the progress of physical and mathematical science, when about a century ago Hume, the historian, who does not appear to have known what part is performed by mathematics in physical enquiry, advanced the idea of *invariable sequence* to account for cause and effect. This dogma, which seemed to involve as consequences the supremacy of law and the impossibility of miracle, gave rise to long and perplexed discussions among the metaphysicians of Germany, one party honestly endeavouring to evade the above consequences, and another fully accepting them. The former did not succeed in their attempts, simply because the question admits of none but a *physical* answer. The progress that has been recently made in mathematical physics has at length furnished an answer, which I will now endeavour to explain.

In physical enquiry mathematics are used as *symbolic aids* to the reasoning power. Every consequence which we reach by mathematics we give a *reason* for, however remote the consequence may be from the premisses, and however difficult it might be to recognise a relation between them without such aid. Mathematics perform this part by the formation of *equations* according to the given conditions of proposed questions, and by the subsequent solution of them according to ascertained rules. Any one acquainted only with Algebra knows

how powerfully it helps the reasoning faculty in replying to questions that require quantitative answers. Algebraic equations are of the *first* order in respect to generality, or comprehension of conditions. All the discoveries of Physical Astronomy result from the formation and solution of equations of the *second* order of generality, called differential equations of the first class. It requires differential equations of the second and higher classes, and consequently of still greater comprehensiveness, to answer questions about the motions of fluid substances, as water and air. Such equations have been applied to account for phenomena of *sound* and *light*. The phenomena of light are explained on the hypothesis that it is generated and propagated in a highly elastic fluid medium, called the æther, as sound is generated and propagated in air. So many phenomena of light have been explained in this manner, that the reality of the existence of the æther is placed almost beyond a doubt. Now when the fact of the transmission of light from one body in space to another is explained by this theory, it is found to resolve itself into *dynamical action transmitted from the one to the other by the intervention of the æther*. Hume's doctrine rests on no other foundation whatever than the gratuitous assumption that two bodies act on each other by gravity without the intervention of an intermediate sub-

stance. But clearly this foundation is shaken now that it has been ascertained that separated bodies *do* act dynamically on each other by means of an intermediate substance, even though the action be different from that of gravity. For there is no rule of philosophy which would justify the taking for certain, in the face of this fact, that gravitation is not effected by the intervention of the same medium.

I have advanced a step beyond my contemporaries in questions relating to the action of the æther, and have found by mathematical reasoning that it not only transmits effects which produce *vibrations* of the parts of distant bodies, as in the case of light, but also effects which produce permanent *motions of translation*, such as are produced by the force of gravity. The law of this action in respect to distance I find also to be the same as the law of gravity¹. It is easily seen that the account this theory gives of gravitation, clears away all foundation for Hume's principle. I consider, however, the argument above, as against this principle, is sufficient without such corroboration.

¹ The mathematical theory which has led to these results has been some time before the scientific world, and though it has not received any expression of assent, it has not been contested. I know enough of the history of physical science to be aware that an advance of this kind in an abstruse department of science can be expected to make its way only by slow degrees.

The doctrine of invariable sequence to account for cause and effect, applies, as was remarked in the Introduction (p. 8), to the transition from external physical operations to personal sensations consequent upon them. These effects, as we argued, are such by the immediate volition of our Creator, and, therefore, come under the category of *miracle*, nothing in our experience helping us to give a *reason* for their being such as they are. If one body gravitated towards another by an operation for which no reason drawn from our experience can be given, which would be the case if Hume's doctrine were true, this operation must equally be called miraculous. It is thus a singular instance of the inconsistency of error, that the promulgator of a doctrine which makes all physical operations miraculous, was himself unwilling to believe a miracle¹.

¹ Baden Powell, in his work on the *Unity of Worlds*, expresses (in p. 115) Hume's principle in these terms: "In physical events all we can really infer is the mere fact of the *invariable sequence* of the one event called the *effect*, after the other called the *cause*." Then in p. 118 he makes mention of "the great step made by Hume." But in p. 120 he says, "when we speak of physical causes in a philosophical sense, we must recur to the idea not of *mere* sequence of events, but of sequence *in reason*." If "sequence in reason" means sequence for which a reason can be given, it is the very opposite of Hume's invariable sequence, which essentially is such as not to admit of the insertion of a reason. Here again is an instance of inconsistency arising out of a false position.

The above theory of cause and effect being shewn to be untenable, I will now state one which appears to be in sufficient accord with observed facts, among these being included well attested miracles. There is no cause and no effect antecedent to the *Will* of an *Intelligent Creator*. When it pleases Him, He can give effect to His Will without the intervention of means. This is a mere exercise of *Power*. But generally He works by means, that is, according to *laws*. There is no necessity for operating in this manner beyond that which is involved in making His *Wisdom* known to *men*, as well as His Power, for the express purpose of creating them like Himself. Essentially, therefore, the laws are such as *we* can comprehend, it being by study and knowledge of laws that man's intellectual nature is perfected, as by acting according to divine laws his moral nature is perfected. It is thus that we become partakers of the "divine nature" spoken of by St Peter (2 Pet. i. 4).

The great advances that have been made in natural science in modern times may be appealed to as evidence as well that the study of laws is the proper exercise of the intellectual faculty, as that the knowledge of them is attainable. Having given much attention to the investigation by mathematics of physical laws, I venture to express the opinion that there

are no laws and operations of nature which may not become intelligible from our sensations and common experience:—that they all resolve themselves ultimately into *pressure* and *inertia*, which we comprehend by *sensation*, and relations to *space* and *time*, which we understand by the experience of our present existence. This view will, I think, eventually be established by means of the wonderful aid which is given to the reasoning faculty by calculation, the application of which was clearly designed by the Creator when he “ordered all things in measure, and number, and weight” (Wisdom xi. 20). Thus, after all, the indications of sense may be the foundations of knowledge. Who will pretend to say that *sound*, *harmony*, *light* and *colour*, as perceived by the senses, are not eternal realities? St Paul says (Eph. v. 13), “whatever is manifested is light¹,” making no distinction between natural and spiritual light.

But He who ordained the laws of nature for the purposes above mentioned is not bound by them. Occasionally He supersedes them, when it is His will to make His *power* more effectually known. This is always done *significantly*, and with reference to *instruction* and *correction*, the manner and the circumstances of such acts having always an *esoteric* meaning, as was

¹ Πάν τὸ φανερούμενον φῶς ἐστί.

stated in p. 80. These acts are *miracles* to us, simply because they are exceptions to ordinary experience; but they are no more miraculous than any *creative* act. The *poet* creates, and by the intervention of writing can make his conceptions perceived by others: God alone can give *immediate* external effect to His thoughts and intents.

The foregoing views are directly opposed to those contained in a recently published work¹, the purport of which is to shew that *positive* knowledge of the Creator is unattainable. I do not see how such an idea can be reconciled with the following passage in St Paul's writings (Rom. i. 19, 20): "The knowledge of God is manifest in them; for God has manifested to them. For the invisible things of Him from the creation of the world, being understood by the things that are made, are clearly seen, both His eternal power and godhead²." Here it is plainly asserted that the

¹ Mr Mansel's Bampton Lectures on the *Limits of Religious Thought*.

² Τὸ γνωστὸν τοῦ Θεοῦ φανερόν ἐστιν ἐν αὐτοῖς· ὁ Θεὸς γὰρ αὐτοῖς ἐφάνηκε· τὰ γὰρ ἀόρατα αὐτοῦ ἀπὸ κτίσεως κόσμου, τοῖς ποιήμασι νοούμενα, καθορᾶται, ἥ τε ἀδιαιτος αὐτοῦ δύναμις καὶ θεϊότης. The translation in the Authorized Version of τὸ γνωστὸν by "that which may be known of God," has a tendency to mislead, as it may be taken to mean, "so much as may be known of God," whereas the word simply means "knowledge," and perhaps, since it is in the neuter gender, in a more comprehensive sense than ἡ γνώσις.

external creation answers the purpose of manifesting God, and the apostle adds that they who, *knowing* God, did not glorify Him as God, were without excuse. If the views maintained in this Essay be true, the *Wisdom* of God consists in the complete revelation of Himself through His works to man, and man, in having the power to comprehend this revelation, is "the image and *glory* of God." The knowledge obtained through the medium of the senses is real knowledge, and the creature knows as the Creator knows. There is nothing "absolute" but the will and the power by which God has unfolded His being to our view, and there is nothing "infinite," which is not so by His antecedent *will*.

I take this occasion to advert to a prevailing misapprehension respecting the idea of infinity, as it is supposed to be derived from mathematical science. We cannot by numbers express *absolute* infinity, nor can we express absolute continuity of value. But we can express quantities as large, or as small, or as nearly consecutive as we please. This phrase, "as we please," the mathematician is compelled to employ in the application of calculation to physical questions, and yet his reasoning and his results are perfectly true. The inference to be drawn from this circumstance is, that the power which the mathematician has over his

numbers, is strictly analogous to the power which antecedently determined the quantitative relations of space, time and matter.

Those who are unwilling to believe the miracles of the Bible, stumble also at its prophecies. The difficulty appears to be in admitting the principle which is expressed in Acts xv. 18, by the words, "known from the beginning." The Apostle James, who is there quoting a prophecy of the Old Testament which ends with saying, that the Lord who speaks the prophecy performs at the time appointed the things prophesied, adds, to account for the things being thus antecedently spoken of, that they were "known from the beginning of the world¹." The principle thus stated is in agreement with the view taken in this Essay, according to which, a plan of creation, formed and known from the beginning, is accomplished in course of time. Again, faith, as defined in Heb. xi. 1, implies the existence of prophecy, because it is essentially *prospective*. And St Peter, in a passage already referred to, says that very great and precious promises (which involve prophecy) have been given, that *by means of these* the faithful may become partakers of

¹ Λέγει κύριος ὁ ποιῶν ταῦτα, γνωστὰ ἀπ' αἰῶνος. This appears to be the best authenticated reading of the passage. Schleusner in his *Lexicon* translates γνωστὸς by *carus*!

the "divine nature." It is clear, therefore, that prophecy is an essential part of the divine œconomy, and that to reject this part, is to reject the whole.

Suppose now that these points are conceded: first, that although discrepancies and difficulties are met with in the Bible, and though it contains miracles and prophecies, it is yet worthy of confidence; and secondly, that there is a science of Scripture, the only legitimate method of obtaining a knowledge of which, is to accept the Scriptural statements as the basis of enquiry, and to proceed by the inductive method which has been so successful in natural science. It may next be asked what will be the effect of adopting this process, instead of framing theories, as has been too much done, and making the words of Scripture bend to them. I cannot but think that the result would be an accession to our knowledge of the Scriptures, and a higher standard of Christian faith. That the Scriptures are in these days very imperfectly understood may be inferred from this single fact. St Paul wrote a long epistle to a mixed society of Roman Christians, whom he had never seen, for the purpose of explaining to them his views of Christian doctrine; and it is evident that he wrote with the fullest confidence that his teaching and his arguments would be understood. In the absence of any sign of misgiving on

this point, we may assume that they were actually understood. A very great number of passages in this same epistle present insuperable difficulties to the most learned theologians of the present day, and differences of opinion on the doctrine it teaches are a permanent source of division and dissension in the Christian community. What else can be inferred from these facts, than that the knowledge of divine truth is not now what it once was, and that a veil is spread over the Scriptures? If we look at the past history of Christianity, there will be nothing surprising in this. Very shortly after the apostolic times the truth began to be assailed by error, which subsequently assumed many different forms, till it resulted in an "apostasy" that sprung up both in the East and the West, followed by a long interval, which, whatever may be said to the contrary, is correctly described as *the dark ages*. During this interval the truths of Scripture were either obscured by human inventions, or were entirely kept out of sight. The Reformation performed a great work in restoring to the world the Bible. But owing to the long night that had reigned before, the reformers read the Word of God imperfectly. Luther, it is known, had recourse for instruction to works written when the light of Christian truth had already been much obscured. This being

the case, it is not an unfavourable symptom that the minds of many in these times begin to crave for more perfect knowledge. And if this dissatisfaction should have arisen from the contact of the Scriptures with physical science, there is nothing in this circumstance which those need fear who have no reason to fear the truth. It is not truth, but error, that receives detriment by being submitted to tests. So far from the science of nature being in antagonism with Scriptural truth, it may prove to be its handmaid, prepared to render help at an appointed season. And this it may do not so much by direct influence, as by the indications it gives of the *principles* to be applied in searching after God's truth, of whatever kind it may be, and of the *spirit* in which such enquiry is to be made. This purpose, which the great advancement of modern science may be intended to answer, is adverted to in the Introduction (p. 11).

But any real accession that may be made by such means to the religious knowledge existing at the present time, will be nothing *new*. The faith and knowledge that God granted in the apostolic times were in such full measure, that we cannot hope for more than a *restoration* of some portion of the favours that were then bestowed, and were afterwards forfeited. And let it be observed that if this be the true state

of the case, a necessary condition of the renewal of God's favour, is a perception on our parts that we have need of it, instead of the presumption, not unfrequently expressed, that nothing can now be added to Christian knowledge. Even though the doctrinal formulæ may remain the same, it is possible that a new spirit may be infused into them.

I had purposed to say something in this work on a question of considerable perplexity, which forces itself on the attention in consequence of the astronomical discovery that "our earth is but one of the lesser pendants of a body, which is only itself an inconsiderable unit in the vast creation¹," namely, What bearing has this fact on Scripture doctrine? But as the question cannot be considered without the admission, which few in these times are prepared to make, that the principles of Scriptural science are of a very abstract and comprehensive character, I forbear discussing this topic at present, and shall only in concluding make a remark which has some relation to it.

After all that has been said about natural and Scriptural science, it is evident that the Scriptures give a subordinate place to knowledge, and set "graces" above it. St Paul writes (Heb. xiii. 9), "It is a good thing that the heart be established with grace, not

¹ See the "Essay," pp. 212, 213.

with meats, which have not profited them that have been occupied therein." And again (1 Cor. viii. 1—3), "Knowledge puffeth up, but charity edifieth. And if any man think that he knoweth anything, he knoweth nothing yet as he ought to know, but if any man love God, the same is known of Him." The end of the creation, as has been argued, is to perfect man in the image of God both outwardly and spiritually. Consequently righteousness, which is a general name for all outward graces, and holiness, which is inclusive of all inward graces, are the chief ends of our creation, graces being, as above shewn, greater than knowledge. Thus as far as regards what is outward, "the righteous man" expresses the end of the creation. And as Jesus Christ was this antecedently and before all the ages, it is said that "*through* Him and *unto* Him were all things created" (Col. i. 16). It is shewn by the context of this passage (vv. 15—20), that this assertion respecting "all things" is made without reference to distinctions by *space*, or *time*, or *number*, and "whether they be things in earth, or things in the heavens" (ver. 20). Hence when the creation is completed,—when the heavens and the earth that now are have passed away, and "there is no more *sea*" (Rev. xxi. 1),—there will be established "new heavens and a new earth wherein dwelleth righteousness."

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APPENDIX.

*(Extract from Archbishop Wake's Preliminary Discourse on
the Epistle of St Barnabas.)*

“But there is yet one objection more, and that much insisted upon by those who are enemies to this Epistle. They tell us it is full of a strange sort of allegorical interpretations of Holy Scripture; and therefore unworthy to be fathered on so evangelical an author. And yet, notwithstanding this, we find Clemens Alexandrinus and Origen, Eusebius and St Jerome (some of the greatest and most learned critics of those ages that were nearest to the time in which it was written) not doubting to ascribe it to St Barnabas, and to think it worthy too of such an author.

“I need not say how general a way this was of interpreting Scripture in the time that St Barnabas lived. To omit Origen, who has been noted as excessive in it, and for whom yet a learned man has very lately made a reasonable apology, who has ever shewn a more diffusive knowledge than Clemens Alexandrinus has done in all his composures?

And yet in his works we find the very same method taken of interpreting the Holy Scriptures ; and that without any reproach either to his learning, or to his judgment. What author has there been more generally applauded for his admirable piety than the other Clement? and yet in his Epistle to the Corinthians we meet with more than one instance of the same kind of interpretation, which was nevertheless admired by the best and most primitive Christians.

“Even St Paul himself, in his Epistles received by us as canonical, affords not a few instances of this which is so much found fault with in St Barnabas ; as I might easily make appear from a multitude of passages out of them, were it needful for me to enlarge on a point which every one who has read the Scriptures with any care cannot choose but have observed.

“Now that which makes it the less to be wondered at in St Barnabas is that the Jews, of which number he himself was originally one, and to whom he wrote, had of a long time been wholly addicted to this way of interpreting the law ; and taught men to search out a spiritual meaning for almost all the ritual commands and ceremonies in it. This is plain from the account which Aristeas has left us of the rules which Eleazar the high priest, to whom Ptolemy sent for a copy of the Mosaical Law, gave him for the understanding of it. When—it being objected to him, ‘That their legislator seemed to have been too curious in little

matters ; such as the prohibitions of meats and drinks, and the like, for which there appeared no just reason'—he shewed him at large, 'That there was a farther hidden design in it, than what at first sight appeared ; and that these outward ordinances were but as so many cautions to them against such vices as were principally meant to be forbidden by them.' And then goes on to explain this part of the law after the same manner that Barnabas has done."

The author then mentions that Aristobulus, who lived at the same time, delivered the like spiritual meaning of the law, and that the method continued among the Hellenistic Jews to the time of Philo, who was contemporary with Barnabas. But there is no reason to connect Barnabas with the school of Philo, the interpretations in his Epistle being peculiarly his own.

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